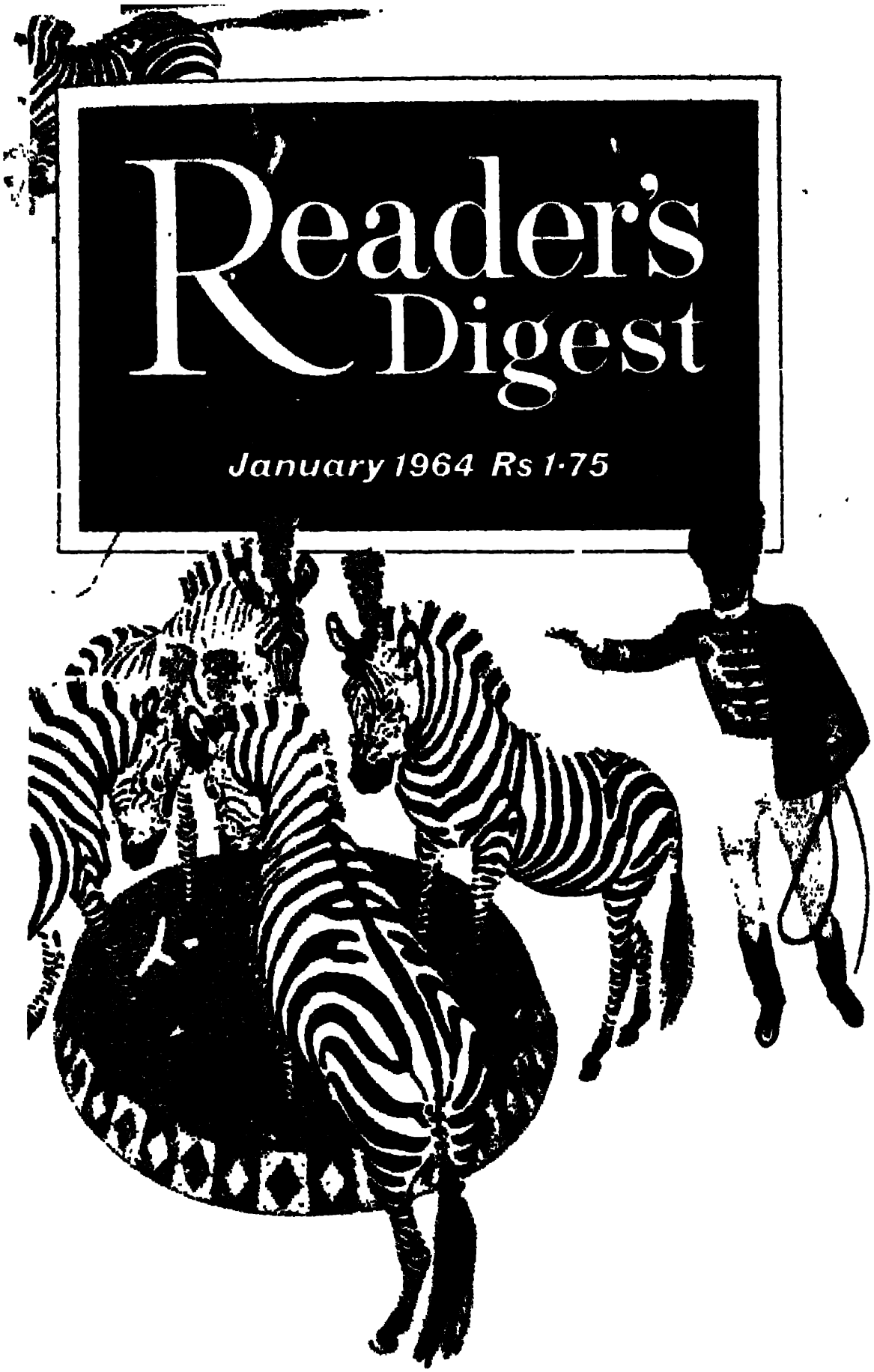
Reader's Digest

January 1964 Rs 1·75



Answers to the quiz on page 7

(1) **appease**--C To pacify; calm; soothe, satisfy; conciliate, as, an attempt to *appease* the hotheads Old French *apaisier*, from Latin *pacem* (*pax*), "peace."

(2) **acquiesce**—B To accept or comply tacitly or passively, without active opposition Latin *acquiescere*, "to rest"

(3) **detonate**--D To explode or cause to explode, as, to *detonate* a charge of dynamite. Latin *detonare*, "to thunder down."

(4) **ransack** C. To search thoroughly, rummage, explore, as, to *ransack* one's memory Old Norse *rannsaka*, "to search a house."

(5) **enjoin**- A To forbid, prohibit (by law) Old French *enjoindre*, from Latin *injungere*, "to join into, charge."

(6) **repudiate**—D To reject or disclaim, disown; renounce, as, to *repudiate* a treaty. Latin *repudiare*

(7) **foment** B To stir up, instigate, as, to *foment* a riot Latin *fomentare*, from *fomentum*, "a warm lotion"

(8) **pre-empt** A To appropriate, take possession of to the exclusion of others, as, to *pre-empt* the best seat.

(9) **burgeon**--D To send forth buds or shoots, sprout; hence, to show signs of life, as, a hope that *burgeons* in the heart Old French *burjon*

(10) **expunge** A: To blot out; obliterate, as, to *expunge* any thought of failure Latin *expungere*, "to mark for erasure"

(11) **culminate**--B: To reach a final effect; attain the highest point or degree, as, effort that *culminates* in success. Latin *culminare*, from *culmen*, "top."

(12) **appertain**—C To belong to by right, association or fitness; as, laws that *appertain* to commerce. Latin *appertinere*, from *ad* and *pertinere*, "to belong."

(13) **countenance**--B To encourage by showing approval, favour; sanction, as, to *countenance* early marriages Old French *contenance*.

(14) **covet**—D: To desire eagerly, long for, especially something belonging to another; as, a nation that *covets* another nation's markets Old French *coveitier*.

(15) **elicit** C: To draw forth, evoke, as, to *elicit* a reply. Latin *elicere*, from *e-*, "out," and *lacere*, "to entice, lure"

(16) **dally**--A To trifle or play with, as, to *dally* with another's affections Old French *dalier*, "to chat"

(17) **proliferate** C To produce frequently; reproduce, especially with rapidity, as, "Government rules and regulations *proliferate*" Latin *proles*, "offspring," and *ferre*, "to bear."

(18) **concoct** B To prepare or make up, as, to *concoct* an appetizing stew, or, figuratively, to *concoct* an excuse Latin *concoctus*, from *concoquere*, "to cook together"

(19) **denominate** D To name, designate, as, to *denominate* a successor Latin *denominare*, "to call by name"

(20) **arraign** - A To call to account, accuse, specifically, to call (a prisoner) before a court to answer a charge Latin *adrationare*, "to reason"

Vocabulary Ratings

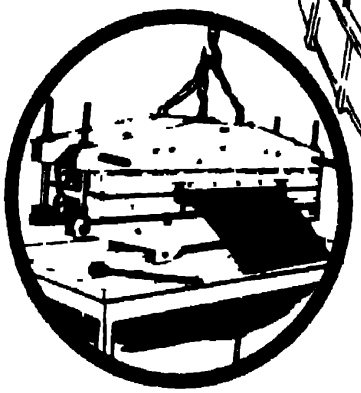
20- 19 correct . . . . . excellent
18 17 correct . . . . . good
16- 15 correct . . . . . fair

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TSY-49

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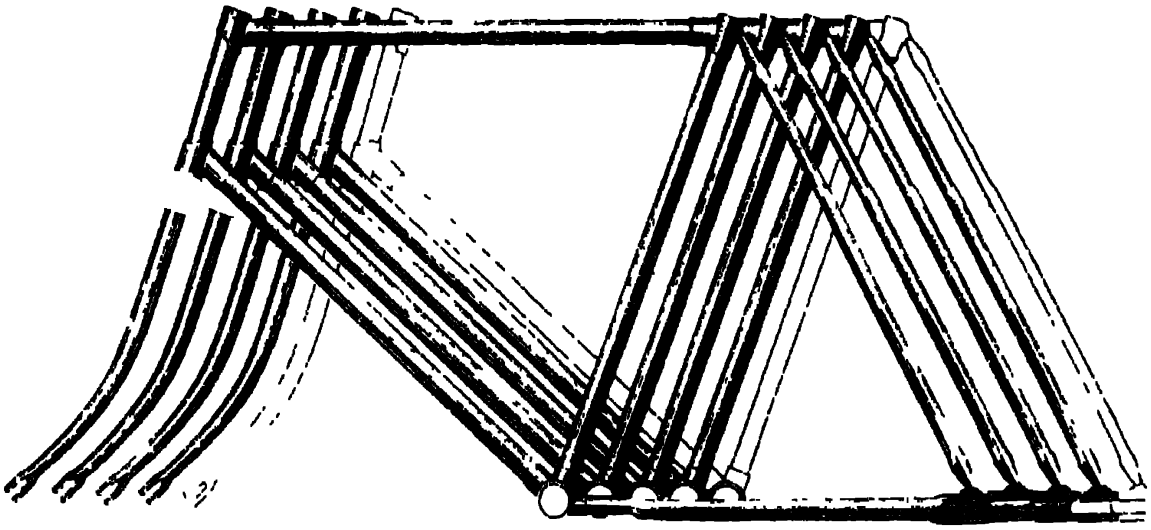
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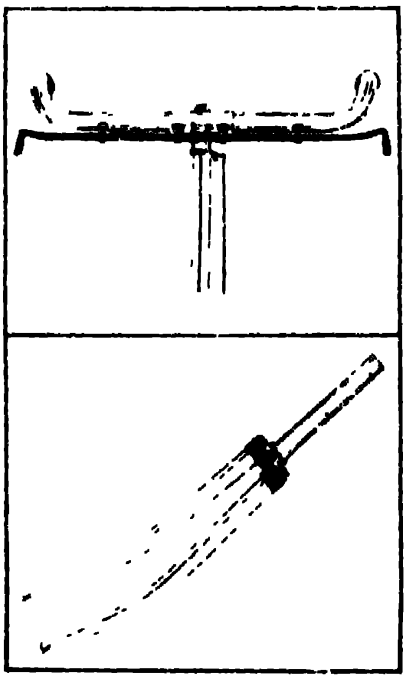
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VOLUME 84 The Reader's Digest JANUARY 1964

Why John Kennedy Died

The following article is being published this month in the U.S. Edition of The Reader's Digest under the signature of the Editors who describe it as an appeal to the American people to "find themselves"

"IN THE long history of the world, only a few generations have been granted the role of defending freedom in its hour of maximum danger. I do not shrink from this responsibility—I welcome it. I do not believe that any of us would exchange places with any other people or any other generation. The energy, the faith, the devotion which we bring to this endeavour will light our country and all who serve it—and the glow from that fire can truly light the world." *—From the inaugural address delivered by President John F. Kennedy on January 20, 1961.*

It must be said, in sorrow and in shame, that the shocking assassination of President John F. Kennedy on November 22 was a product of our times. Although we live in an era of so-called enlightenment, of dazzling material achievement, the spirit of hatred and violence is a growing malaise throughout

the world. In Dallas, it erupted into an act so monstrous that Americans must now look into their hearts and ask what is happening to them as a people and to mankind.

Abraham Lincoln said of his country that it was "A nation under God." These simple words voiced a nobility of purpose which has carried the United States through many crises of war and peace. The American people are dedicated to tolerance and fair play and to the democratic processes. They believe in the principles of Christianity. That is what they have said.

Yet somehow, in the years since the war, Americans seem to have lost sight of the ideals which have made their nation strong and great.

Extremists of many persuasions—the Communists, the self-righteous zealots of the Far Left and Far Right, the racists, the religious bigots—preach the sickness of intolerance and surround themselves with their own cults of worshippers. It may be argued that, under the blessing of freedom of speech, these purveyors of hate are entitled to speak as they please. Indeed they are, under the law. But it is also true that the reckless abuse of any freedom can turn it into a ghastly mockery. The freedoms of democracy were established on the assumption that men of reason and goodwill could learn to accommodate themselves to the decisions of the majority. Fair debate and honest opposition, which are two of democracy's strongest pillars, must not be confused with vilification and bigotry.

Inevitably, the tragic result of hatred is violence, and violence feeds upon violence and breeds more violence. A church is dynamited and children are killed in Birmingham, Alabama, and a few weeks later stones are thrown through the windows of a Negro home in a respectable community of suburban Philadelphia. Beatings and shootings lead to other beatings and shootings in distant cities. A zealot with hatred in his heart tells his followers that "those Kennedys ought to be shot," and finally a rifle speaks in Dallas and a President dies. Not only does the world lose a great leader—a man dedicated to peace and the betterment of mankind—but all Americans are faced with the negation of the democratic ideal which they once cherished more than life itself. And as a final act in this epic of shame, the suspected assassin is struck down by another lawless bullet.

What is happening to the United States? Have Americans carried the violent spirit of war over into their peacetime lives? Have they become so complacent in their enjoyment of their material blessings that they have forsaken those nobler things of the spirit? Have they forgotten the ancient truths spoken by the prophets? Does the compassion of Christ no longer mean anything to large numbers of Americans?

On the evening of President Kennedy's assassination, a television reporter prowling the corridors of the United Nations sought the comments of several delegates from the newly emerged nations of Africa. Under the profound impact of the murder in Dallas, they questioned whether democracy was a valid form of government--whether it could last.

Democracy will last, because it is the only decent form of government that man has been able to devise. But a world in turmoil can ill afford the spectacle of a nation—supposed to be the shining example of a great political faith—settling its differences with violence. Americans cannot reform the rest of the world, but they can and must reform themselves. They must search their souls.

It is time for parents to assert their authority once more. It is time for the churches and the schools to try harder than they are now trying to rebuild the moral fibre of their country. It is time for men of fair minds to speak out, with a great and persistent voice, against the extremists of all flavours. And this applies doubly to politicians running for office.

On that black night of November 22, a radio reporter stood in New York's Times Square, studying the reaction of the people. They were still stunned, numb, unbelieving. But they sensed, too, that this dreadful event was not something apart from them. It was their history that had been made this day. It was an event in which they were all somehow involved. And one young man he talked with summed it up -this haunting sense of involvement and personal responsibility. "We should all go home to discover who we are," he said, "We should all go home to find ourselves."

Murder in Dallas

An account of events that took place in Dallas, Texas, on November 22, 1963—a day that will for ever be engraved in shame in American memory

In one sudden, swift, awful convulsion of history last November 22, the majesty and the burdens of the Presidency of the United States shifted from one man to another. John Fitzgerald Kennedy was cut down in his 47th year by an assassin's bullet in Dallas, Texas. In the brief span of 30 minutes, incredibly, this tanned,

vigorous, hale young man—the youngest ever elected President—was dead.

The assassination was an act of disunity. Yet it produced its own unity, a communion of disbelief and sorrow and anger that touched 190 million Americans. And it demonstrated once again the remarkable continuity of this oldest of constitutional republics. For the eighth time, a president had died in office—four of them at the hands of an assassin. But, just 107 minutes after John Kennedy's death, the ritual act of succession had been performed. Lyndon Baines Johnson had recited the 34-word oath of office, and the two presidents were homeward bound together.

That Certain Smile. John Kennedy had been close to death before. Like any president, he had been threatened innumerable times—870 by post in his first year alone. Once before, after a difficult back operation, the last rites of his church had been uttered over him. And years before that, when a Japanese destroyer knifed his tragile PT 109 in two, he said, "This is how it feels to be killed."

Yet only his political life expectancy seemed to concern him during his last week of life. Still an unannounced candidate for a second term, he swung first across Florida and then into Texas. Though the trips were advertised as non political, the President was wearing that certain smile. And he was, as always, careless of his own security. In the glow of southern sunshine and the friendly crowds that lined his way, he had the protective plastic bubble-top of his custom-made blue Lincoln limousine lowered so that he could stand and wave and smile as he rode. But then, hadn't every U.S. President since William McKinley travelled in open cars? And hadn't the Secret Service checked every foot he would travel?

The Texas glow is particularly comforting. The President was making encouraging headway on one prime mission—smoothing over a bitter factional fight between a Tory Democratic *bloc* led by Vice President Johnson and Governor John Connally and a Liberal coalition around Senator Ralph Yarborough. His wife Jacqueline, making her first campaign journey with him since 1960, was rousing the crowds at every stop. San Antonio. Houston. Fort Worth, and now Dallas.

The President was rousing them, too. He started the day in Fort Worth, talking to a crowd of rank and file Democrats in his hotel car park, then to a Chamber of Commerce breakfast inside.

The Chamber gave him a broad brimmed hat; the President, smiling, promised to try it on back home at the White House. He put in a happy 95th birthday call to former Vice-President John Nance Garner at Uvalde. "God bless you,"

the grizzled Cactus Jack said into the phone. "You're my President and I love you. I hope you stay in there for ever."

At 11.37 a.m., the President's big fan-jet—Air Force One—settled in at Dallas's Love Field. He and Mrs. Kennedy, who was carrying a bouquet of red roses, shook hands with the whooping crowd across a chain fence. Then they slipped into the back seat of the Presidential limousine—Kennedy on the right, his wife beside him. Governor Connally and his wife took the folding seats. Three of the President's 36 Secret Service escorts rode in front, one on a side platform, and a carload more in the "Queen Mary" a bulletproof security car close behind. Yarborough joined the Johnsons in the third car in the 12-car motorcade, and off it rumbled for the ten-mile trip through downtown Dallas to the President's next speaking date- a civic luncheon at the Dallas Trade Mart.

The President and the Rightists. As the President well knew, Dallas is a citadel of Right Wing strength. Yet, to his pleasant surprise, thousands of cheering Dallas residents shirt sleeved in the 76-degree warmth- lined his route 12 deep. Through the downtown ride, he stood and waved. Then, as the motorcade rolled at 25 miles an hour down Main Street towards a triple underpass in an industrial area edging downtown, he sat back and chatted happily with the Connallys.

"Well," said Mrs. Connally, "You can't say Dallas isn't friendly today."

Crack!

A rifle shot split the air.

Crack! Crack!

Two more followed.

The President of the United States -caught apparently by the first spun in his seat. "I thought it was a backfire," said Dallas patrolman James Chaney, who was riding a motorcycle six feet from the right rear bumper of the President's car "The President jerked his head round . . then came the second shot and his head exploded in blood . ."

Turning to look, Governor Connally took the third bullet just below the right shoulder blade. It ripped out through his chest, pierced his wrist, and lodged in his thigh. But the turn saved his life.

For a chaotic moment, the motorcade ground to an uncertain halt.

"Oh, no!" Jacqueline Kennedy cried, tumbling across her husband's body to shield him. His arm reached out, rigid, his fist clenched; she clasped it in one white gloved hand.

Secret Service agent Clint Hill vaulted from his perch on a platform at the left rear bumper into the back seat and fell across them both. Governor Connally slumped into his wife's arms.

An agent up front jumped to his feet, grabbed the radio-telephone

and called to police riding ahead: "Let's go straight to the nearest hospital." Another yelled back to the Johnson car: "Get down—get down!" The Vice-President, his wife, and Yarborough ducked to the floorboards.

Reflexively, the President's Secret Service driver started the car and roared off towards Parkland Memorial Hospital, three and a quarter miles away. "Take it easy," another said. "If he's not dead, we don't want to kill him now." The driver slowed to 60—half top speed.

Blood and Roses. The dash to the emergency entrance of the hospital took nine minutes. When the car pulled up, the President lay unconscious on his back, his head cradled in Mrs. Kennedy's lap, his blood spattering her strawberry wool suit. On the floor, three twisted red roses and a ragged bouquet of asters lay in a pool of blood.

Mrs. Kennedy helped agents and hospital attendants to put the President on a stretcher. Tearless and numb, she walked at his side, clinging to him, as he was carried on to the loading dock. Close behind, on another stretcher, came Connally.

Kennedy was wheeled into Emergency Room One—a windowless, grey-tiled cubicle banked with cabinets and spidery medical equipment—and placed gingerly on a stark operating table, its black leather pad covered with a white sterile slip. Outside, Mrs. Kennedy stood between the Johnsons, holding their hands, waiting. Aides and Congressmen wandered aimlessly about.

Fevered Race. The first doctors to glimpse the President knew it was too late. One bullet had laid open the back of his head with bone-crushing force, burrowing with a wake of skull fragments into his brain. Another—or perhaps the same bullet—ripped his throat just below the Adam's apple. "Medically speaking," said one doctor, "he was dead when he was hit . . . He had a lethal wound . . . It was apparent, medically, that he could not recover."

On the table, he drew one sharp breath and then his body lay still. Nevertheless, some ten doctors in Parkland's emergency room went to work to try to revive the President. First, Dr. James Carrico inserted an oxygen tube into the President's mouth, but because of the neck wound, the life-sustaining oxygen wasn't getting through.

Dr. Malcolm Perry dashed in from the cafeteria. The surgeon pulled on rubber gloves and—without stopping to scrub up or put on a surgical gown—performed a tracheotomy, splitting the windpipe at the wound and placing the oxygen tube in the throat. Other doctors gave the President transfusions of whole blood (O negative, the "universal donor" type).

Mrs. Kennedy had slipped into the room; Perry glimpsed her over his shoulder as he worked. "She wouldn't leave," he said. "She's a

real thoroughbred. She stayed with him all the time."

The doctors sensed that blood and air were accumulating in the President's chest cavity. Perry then performed a closed-chest drainage: another tube was placed between the ribs to keep the chest area free of fluids and air so that the lungs would not collapse. But no breath came.

Finally, standing on a stool for leverage, Perry began kneading Kennedy's breastbone from the outside—a desperate effort to get the heart muscles working and blood coursing again. When Parkland's chief neurosurgeon, Dr. Kemp Clark, arrived, an electrocardiograph machine was hooked up to keep track of the heartbeat. Clark watched the graph paper from the machine for a few minutes, then turned to Perry and said: "It's too late, Mac." Dr. Marion Jenkins, monitoring the oxygen equipment, pulled a white sheet across the body.

In the feverish attempt to revive the President, nobody noticed the clock. Clark arbitrarily set the time of death at 1 p.m. —30 minutes after the shooting.

At 12.57 p.m. two Dallas Roman Catholic priests, the Very Rev. Oscar Huber and the Rev. James Thompson, were summoned to the President's side. Father Huber drew back the sheet from the President's face, and with a thumb dipped in holy oils traced a small sign of the cross on Kennedy's forehead. In Latin he intoned, "I absolve you from all censures and sins in the name of the Father, and of the Son and of the Holy Spirit. Amen. If you are living, may the Lord by this Holy Anointing forgive whatever you have sinned . . ."

The Last Word. Newsmen waited in a nurses' classroom for official word. At 1.33 p.m., assistant White House press secretary Malcolm Kilduff pushed into the room, a piece of notepaper in one hand and an unlit cigarette in the other. Red-eyed and tremulous, he read: "President John F. Kennedy died at approximately 1 p.m. central standard time, today here in Dallas. He died of a gunshot wound in the brain."

"Oh God," someone choked. And then reporters dashed for the phones.

Meanwhile, a dark bronze coffin was wheeled into Emergency Room One, as Mrs. Kennedy waited with her dead husband. There, the First Lady kissed her husband's lifeless lips, slipped the ring from her finger, and placed it on his.

As the coffin was wheeled out, Mrs. Kennedy walked beside it, her pillbox hat missing, her hair tangled, her suit bloodied, her hand resting gently on the coffin as it rolled towards the white hearse. Then, declining to ride with the driver, she sat in the back beside her husband's body.

The Oath. What counted most now was the continuity of Government, the constitutional rite

reuniting the abruptly broken past with the uncertain future.

The constitution dictated that the mantle of the Presidency pass to the Vice-President, to the towering, folksy, politically wise Texan who had seemed so unlikely a running mate for Kennedy in 1960—and yet, only the previous month, had won the President's public endorsement for the 1964 ticket.

Ahead of the hearse, Lyndon Baines Johnson—under heavy guard—sped unannounced back to Love Field, climbed aboard Air Force One, and stepped into the 12- by 15-foot Presidential conference room. The Federal judge who would swear him in—his old friend Sarah Hughes, a tiny woman of 67—had been summoned.

At 2.18 p.m., the hearse drew up and the coffin was carried up the rear ramp, Mrs. Kennedy still close behind. The gold-upholstered conference room was already crowded and sweltering after three hours in the hot Dallas sun. Larry O'Brien, Kennedy's legislative liaison man, handed Johnson the small, leather bound Bible which the former President had kept in his aft sleeping compartment. Mrs. Johnson took a place at her husband's right elbow, Mrs. Kennedy at Johnson's left. Among the 27 spectators behind them was Admiral George Burkley, Kennedy's personal physician, his shirt cuffs still bloodstained.

Her words barely audible above the whine of the fan-jet engines, Judge Hughes read the oath:

"I do solemnly swear that I will faithfully execute the office of the President of the United States, and will to the best of my ability preserve, protect and defend the Constitution of the United States."

Softly, the new President repeated the words, adding at the close: "So help me God." He turned to his wife and kissed her on the forehead. Mrs. Johnson took Mrs. Kennedy's hand in hers and told her, "The whole nation mourns your husband." Johnson clasped her hand, too.

"God bless you, little lady," Dallas Police Chief J. E. Curry told her, "but you ought to go back and lie down."

"No, thanks, I'm fine," Mrs. Kennedy said, mustering a faint smile. Moments later she left to take up her seat beside her husband's coffin once more.

First Orders. At 2.41 p.m. Johnson gave his first order as President: "Now let's get airborne." As the jet roared aloft and headed home to Washington at 635 miles per hour, he set to work composing a statement: "This is a sad time . . . We have suffered a loss that cannot be weighed. For me it is a deep personal tragedy. I know the world shares the sorrow that Mrs. Kennedy and her family bear. I will do my best. That is all I can do. I ask for your help—and God's."

Condensed from Newsweek

There is nothing like the challenge of responsibility to bring out the best in human nature. A trained observer reports on an exciting new development in human relations

By Vance Packard

Author of "The Hidden Persuaders," "The Status Seekers," "The Pyramid Climbers"

A series of slim, one storey buildings near San Diego, California, is the home of one of the most revolutionary companies in America. Called Non Linear Systems, Inc., the firm makes electronic instruments. It is revolutionary not because of its products but because of the achievements of its people. Three years ago this company threw out its assembly lines, and with them a host of assumptions which businessmen have been making for 50 years about the nature of man as an employee.

Non-Linear's president Andrew Kay, had staked his company's future on the belief that ordinary people have great potentialities for growth and will perform far better if they are trusted with important responsibilities. Today businessmen and social scientists come from many parts of the world to witness the remarkable results of this philosophy.

When Non-Linear discarded its assembly lines it kept all its people

some with only elementary-school education—but divided them up into small teams of fewer than a dozen people. Each team runs its own little business. Each has its own rooms, for which it decides the décor; its own door to the outside. There are no time clocks. Everyone receives a weekly salary, with no deductions for sickness or lateness. There are no scheduled coffee-breaks—anyone can get coffee whenever he feels like it.

In a stroll through the plant's buildings, I watched a unique assembly team. Non-Linear makes digital voltmeters — meters that measure electric voltage in terms of numerical digits. All the components for one of these extremely complex instruments arrive in a fibreglass kit. Typically, one person assembles the entire voltmeter from start to finish. It may take three weeks If there is a call for quick delivery, two or three others in the group of seven will pitch in to help, but the original builder still has prime responsibility for its perfection.

A grey-haired woman near me was smoking as she busily laid out a pattern of wire circuits. (Efficiency engineers would forbid smoking on the job.) Propped up in front of her were several pages of diagrams and notes. "This woman has done all her own planning and programming," my guide said. "She tests as she goes along. When she finishes this instrument she will sign her name to it. If a customer develops trouble with it, the instrument will come back to her for correction."

At Non-Linear, any project manager in engineering can spend up to 2,500 dollars (Rs. 12,000) for a piece of needed equipment, simply on his own signature. The salesmen submit no expense accounts Each is given an expense allowance large enough to cover all reasonable travel, car expenses, lodging, entertaining, and to permit him to replace his car every two years. If he can get by on less, he is free to pocket the savings. The only check is on results.

What have been the results? Sales have doubled in the three years that the new programme has been in force, and the man-hours devoted to building each instrument have been cut in half—enabling Non-Linear to offer the highest pay in the community. "Efficiency is way up," says vice-president Arthur Kuriloff. "Morale is excellent; our labour turnover is down to a quarter of the national average. Complaints from customers have dropped 90 per cent." Although Non-Linear now has 30 competitors, it has more than half the entire market—proof of the high quality of its product.

The wonders that follow when working people are suddenly given responsibility have been further documented in a series of experiments at another large company with thousands of employees. Because the experiments are still in progress the company cannot be

named. But the man who has sparked several of them is Dr. Chris Argyris, a behavioural scientist at Yale University's Department of Industrial Administration.

The company president, intrigued by Dr. Argyris' assertion that the average employee works at only about one-third of his productive capacity, challenged the professor to show him a better way to motivate his workers. Together they went into a plant where a product comparable to a radio was being assembled. At one table were 12 girls. Each girl, in performing her allotted segment of the assembly, executed a series of actions in accordance with detailed instructions worked out by an industrial engineer. This unit also had a foreman, an inspector and a packer.

Dr. Argyris proposed a one-year experiment during which each girl would be made responsible for assembling the entire product, *and would do it in any way she decided was best for her*. She was to handle all inspecting, sign her name to the product, pack it, and handle any correspondence made necessary by complaints about it. The girls were promised they would suffer no cut in pay if production fell off, but would receive increased pay if production rose.

The experiment began. By the end of the first month this unit's output was down to only 30 per cent of its former level. By the end of six weeks it was even worse. Morale among the girls was low; some were visibly upset. This situation continued to the end of the eighth week. Then the output started up. By the 15th week it was higher than it had ever been before—without the help of inspector, packer, foreman or industrial engineer! Output remained high throughout the year. Costs due to errors and waste dropped 94 per cent. Letters of complaint dropped from 75 a year to only three.

At the end of the one-year period the 12 girls returned to their regular assembly-line jobs. Three of the girls were relieved to be able to stop worrying about the quality of their work—but the other nine were vexed by the loss of responsibility.

When the company's other experiments in designing more responsibility into jobs are completed, it hopes to combine all the results into the design of an exciting new factory. Dr. Argyris predicts it will be a factory without foremen.

A number of other companies are also experimenting with broadening individual responsibility. At Union Carbide headquarters in New York City, a task force has been created, managed by a husky, genial executive named John Paul Jones. One of its objectives is to loosen up the traditional patterns of superior-subordinate relationships in the vast (73,000 employees) company. The hope is to make the most of the explosion of creativity that can come when people are challenged.

This task force for Organization Development is itself a good example of the practice it preaches. Jones and each of his staff associates has an area of prime accountability within which he has absolute responsibility for decisions, including spending his share of the budget.

Making each individual accountable obviously involves an element of risk. Jones's answer: "Risk is good. Some performances may be poor—but you can't have it both ways. If you set up a system that makes it difficult for people to fail, it will be too tight to let the good ones grow as fast as they can."

These and other experiments and innovations in management practice all seek to halt a trend in modern industry, as businesses have grown both in technology and size, industrial planners have built into them more and more controls over people. They have "structured" the way jobs are to be done, often simplifying the job down to the smallest possible number of repetitive motions.

Such controlling and narrowing depersonalizes the work, and insults the worker by making of him an interchangeable part.

Some employees, including managers, fight back at the system that leaves them feeling impoverished in their lives. They go slow or quietly decide among themselves what will constitute a "fair day's work" (voluntary restriction of output is practised on an enormous scale throughout industry). Others learn to be indifferent, to work to rule, to ask for time off.

Millions of people have become hardened by years of living with bureaucratic controls into expecting little responsibility, even into avoiding it, putting emphasis not on ambition but on security.

The true nature of man is more accurately reflected in a recent analysis of attitudes of 200 accountants and engineers working for certain companies in the Pittsburgh region. The study was made by a team of psychologists led by Dr. Frederick Herzberg. The 200 subjects were asked to describe events of their careers which caused them to feel exceptionally good or bad about their job.

It was found that, of all the major plus factors, the thing that produced the greatest long-term satisfaction was the sense of being given responsibility. The men spoke proudly of being allowed to work without supervision, being held responsible for their own efforts. In their final report, the psychologists proposed that jobs be reshaped to increase "to the maximum" the ability of each employee to achieve some personal fulfilment of his own potentialities, some personal growth in responsibility.

Of course, a good many situations exist where it is difficult to bestow much real responsibility upon an employee. Still, there are always ways to challenge him more fully,

ways that will produce benefits for both him and the company.

The United States Steel Corporation, for example, wanted to reduce serious accidents in its mills. Company officials had gone to great lengths, using all the conventional safety techniques without much result.

In a new approach, the officials started asking the men themselves what should be done. At the South Chicago plant, which had one of the higher accident rates in the steel-producing plants of the company, they started calling a few men at a time into a conference room. The safety co-ordinator invited each man to analyse his job in detail and to suggest how it could be made safer. I sat in on one conference and was impressed by the variety and soundness of the ideas brought forward.

The conclusions developed by the men at these conferences went before a safety review board and were usually adopted. Two years after the South Chicago plant began these small forums, its accident rate was one of the best ever achieved by any major steel plant in the United States up to that date. Now the conference approach has spread to some other U.S. Steel plants. And—the biggest surprise—wherever employees have been consulted, morale has usually shown a distinct rise, and production, too.

The feelings that come from experiencing responsibility on the job were most eloquently summed up by the Herzberg group of psychologists. "Having the opportunity to grow," they stated, "is still the most exciting thing that can happen to someone in our society."

Grave Misgivings

In the cemetery in Great Grimsby, Lincolnshire, a tombstone carries the following message: "Owen Moore Has Gone Away Owin' More Than He Could Pay." The tombstone was erected by his creditors.

—Thomas Lahey

In a cemetery in Orléans, France, there was an epitaph: "Here lies Juliette Legrand, wife of a bookkeeper." As Monsieur Legrand rose in his job he wanted his late wife to share in his promotion. The epitaph now reads: "Here lies Juliette Legrand, wife of an assistant manager."

—*Stuttgarter Zeitung*, Germany

At Falmouth Foreside, Maine, on the tombstone of a woman who for nearly 70 years had sponsored dozens of laudable community enterprises, is the simple epitaph: "She averaged well for these parts."—Edward Weeks

Watch Your Language!—II

By Theodore Bernstein

Can you spot the misused word in this sentence: "After a series of fits and starts the market eked out a gain."? For years Theodore Bernstein, Assistant Managing Editor of the New York Times, has campaigned for better writing in that already excellent newspaper. One of his methods is to comment on errors in the paper in a peppery house organ called "Winners & Sinners." Now his comments have been collected in two books. Last August The Reader's Digest published a selection from the first book "Watch that Word!"; here are extracts from the second. And what did Bernstein find wrong with that sentence about the market? See his remarks about "eke" on page 35.

Amid, among. *"Firemen groped among the wreckage."*

"Among" means in the midst of countable things. When the things are not separable, the word is "amid" or "amidst."

As well as. *"He, as well as the producer, are Broadway newcomers."*

"As well as" is a subordinating, not a co-ordinating, conjunction; it is not the equivalent of "and." Therefore, its presence does not make the subject plural. The sentence should read, ". . . is a Broadway newcomer."

Circle. *"Thousands had circled round the bier."*

Strike out "round."

Climax. *"The drop in popularity of the larger engine reached its climax last September."*

"Climax," which comes from a

Greek word meaning ladder, refers to an ascending series. A low point cannot be a climax.

Conclave. *"Secret Conclave Winds Up Discussion."*

The word "conclave" (based on the Latin "clavis," meaning key) originally referred to a room that could be locked, and now means a secret or private meeting. "Secret' is redundant; therefore omit it.

Convince. *"Three people tried to convince her to take her seat on the plane."*

"Persuade" would be the proper word in this construction. "Convince" may be followed by an "of" phrase or a "that" clause, but not by a "to" infinitive. "Convince" has the meaning of satisfy beyond doubt by appealing to reason. "Persuade" has the meaning of inducing or winning over by appealing to reason and feeling.

Eke. *"After a series of fits and starts the market eked out a gain."*

"Eke" has Anglo-Saxon roots meaning to increase or add. When you eke something out, you add to it or supplement it. What is eked out is not the thing that results but the original stock or supply. In short, "eke out" does not mean "squeeze out," as the quoted sentence suggests.

End result. *"The end result of segregation and lack of compulsory education for Africans . . ."*

An end result is conceivable in the working out of a mathematical problem in which there are intermediate results, but in everyday English an end result is simply a result.

In terms of. The phrase "in terms of" has a fine, learned sound. But usually it signifies nothing. "He could not have been thinking in terms of the job he was to take." What is meant here is *"about* the job."

Into. *"He dived in the river and swam in the direction of the woman."*

If he dived in the river, he was already in the water before he performed the action; "in" denotes merely position. The required word here is "into."

Mutual. *"Their mutual interest in guns has provided an informal means of instructing youngsters."*

"Mutual" has the connotation of reciprocal: If Jones respects Smith and Smith respects Jones they have a mutual respect. However, if Jones and Smith are both interested in guns. that is not a mutual but a common interest.

Podium. *"President Ayub gripped the podium as he answered questions."*

Toehold? A podium is a platform or dais that you stand on or sit on. Therefore you do not grip it, as you would a lectern. ,

Reiterate. *"Dr. Brode reiterated the suggestion he made last December."*

"Iterate," which is not in general use, means to say or do a second time or often; "reiterate" means, therefore, to say or do over and over

again. "Repeat" or "restate" is the better word for a first echo.

Repulse. *"Some students are repulsed by the thought of running into debt for an education."*

To be repulsed is to be beaten or driven back. The desired word is "repelled," which conveys the idea of aversion.

Trove. *"A Pre-Inca Trove Is Found in Peru."*

Do you know what a trove is? It's something that is found.

Via. *"Attack would entail simultaneous delivery, via missiles or bombers, of nuclear weapons."*

"Via" means by way of (in a geographical sense), not by means of.

All Good Wishes

THE New Year is at the door. I wish for the stupid a little understanding, and for the understanding a little poetry. I wish a heart for the rich, and a little bread for the poor. But, above all, I wish that we may blackguard each other as little as possible during the New Year.

—Heinrich Heine

Rising to the Occasion

THE chairman introduced the speaker with great fervour, stressing her years of faithful service to the club and eulogizing her ability and charm. Somewhat overwhelmed, the speaker faced the audience.

"After such an introduction," she said disarmingly, "I can hardly wait to hear what I'm going to say." —A. H. H

AFTER-DINNER speaker's remark: "Now before I start I want to say something."

ONE OF the major embarrassments to which lecturers are submitted is the audience's looking at their watches. I once asked best-selling novelist John Erskine if he found the ordeal particularly trying.

"No," he replied, "not until they start shaking them!"

—Frank Crowninshield in *Vogue*

A GUEST of honour is a man who eats a meal he doesn't want so that he can get up and tell a lot of stories he doesn't remember to people who've already heard them. —G. J.

New Tickers for Weak Hearts



Several thousand people are walking about today with a small timer embedded in their bodies. This is the electronic pacemaker, a lifesaving triumph of modern surgery and technology

By J. D. Ratcliff

A year ago a 46-year-old woman we will call Agnes Gentry suddenly fainted. She thought little of it at the time, but then the fainting spells began coming with frightening frequency. Once she blacked out and tumbled down a flight of stairs.

Sensing that her heart was beating very slowly, she pressed fingers to her wrist and counted: only 20 pulse beats a minute. Soon she no longer had the energy to drag through a fuzzy, slow-motion life, and took to her bed. At times her heart stopped beating entirely for 20 seconds or more. "When I went to sleep, I never knew whether I would wake up," she says.

Mrs. Gentry was a victim of heart block, a terrifying disorder in which the electrical impulses responsible

for the timing of the heartbeat falter or fail in transmission. Mrs. Gentry thus became a candidate for an extraordinary new operation—one which saved her life.

An electrical timing device no larger than a railway guard's watch was actually implanted in her body and wired to her heart. Almost instantly the beat became steady, dependable.

"The fog cleared from my mind," she says. "I do my shopping and housekeeping, lead a reasonably active life, and feel fine!"

Mrs. Gentry's case is representative of several thousand patients of all ages who have, in effect, had their hearts rewired and their lives renewed.

In a motor-car engine, a device called the distributor fires the cylinders in orderly sequence. In the normal heart, a small network of fibres called the pacemaker, at the top of the right auricle, does much the same thing. It shoots out a rhythmic pulse of electricity 70 to 80 times a minute. This "fires" the auricles or upper chambers of the heart, causing them to contract. Then, after a split-second lag, the whisper of electricity is passed along to the Bundle of His (pronounced hiss), a minute collection of nerve and mucle fibres named after German physiologist Wilhelm His. From here the electrical discharge spreads to contract the ventricles, which do most of the work of pumping blood to the arteries.

Miraculous and tough as the wiring system is, disease, drugs and heart attacks can damage the Bundle of His. Sometimes, when a clot blocks a coronary artery, scar tissue forms which may invade the vital bundle. It can also be injured during heart surgery. Tiny, hidden from the surgeon's eyes, it can be destroyed by sutures despite the most elaborate precautions.

With this crucial electrical relay station damaged or destroyed, the heart, like a faulty car engine, begins "missing." Ventricles may begin functioning of their own accord, but out of time with the auricles. If the disparity is mild, the effect of such heart block may be minimal. At other times the ventricles may go into fibrillation, fluttering wildly and pumping little or no blood.

The beat may speed up or, more frequently, slow down—to 20 or 30 contractions per minute. At this level, kidneys get insufficient blood, and fluids accumulate in tissues. The brain, too, is starved of oxygen and operates in slow motion. In severe cases the heart stops intermittently, for perhaps several minutes. Fainting is common. One patient kept a log of his blackouts: 842 in 11 months. Another victim fainted and fell so often that he wore a crash helmet for protection.

The outlook for patients with electrically out-of-kilter hearts has always been grim. One study found that half the severely stricken died

within three months, despite treatment with various stimulants. Hope for these patients began to dawn in 1952 when Dr. Paul Zoll of Boston's Beth Israel Hospital developed an artificial pacemaker, an external one, which sent sharp jolts of electricity through the chest wall to the heart. But Zoll's pacemaker had severe drawbacks. With each shock, chest muscles went into rigid contraction. Burns were frequent, and many patients were terrified of the closely-spaced shocks.

Meanwhile, Dr. C. Walton Lillehei, professor of surgery at the University of Minnesota School of Medicine, had been troubled by the frequency of heart block after otherwise successful open-heart surgery. Thinking of patients doomed to die from faulty heart action, he had an idea: why not *rewire* their hearts—by hooking electrodes to them, stringing wires to the outside of the body, to an external pacemaker? With the direct connexion, rhythmic impulses of only three or four volts should be sufficient to produce a dependable beat.

In 1957 Dr. Lillehei began installing his life-saving wires. But here again there were difficulties. Infection could occur where wires came through the skin, and the external pacers were a problem during bathing and exercise.

About this time several groups began thinking in radical new terms. Among the leaders: Dr. William Chardack, chief of surgical service at the Veterans Hospital, Buffalo, New York; Dr. Åke Senning of Stockholm's Karolinska Institute; Dr. Adrian Kantrowitz of Brooklyn's Maimonides Hospital; Dr. Zoll in Boston. Why not a pacemaker, equipped with long-lasting batteries, which could be implanted *in the body*? Such a pacer would in effect become a new body organ. Obviously it had to be totally reliable, and completely watertight, so that body fluids would not cause short circuits. And it had to be tiny, so as to cause no discomfort.

Experts went to work. Wilson Greatbatch, an electronics consultant collaborating with Dr. Chardack, started in April 1958 in the garage laboratory behind his home —and had his initial model ready in ten days. Resistors, condensers, transistors, minute mercury batteries were all squeezed into a five-ounce plastic package.

Dr. Chardack and his associates anaesthetized a dog, opened its heart and strangled the Bundle of His with sutures. The electrocardiograph pattern dancing across the screen of an oscilloscope (much like a television screen) went into the characteristic pattern of complete heart block. Then stainless-steel electrodes from Greatbatch's pacemaker were hooked into the left ventricle wall. When the pacemaker was switched on, the dog's heart settled into a normal pattern. The pacer was working! But how long would such a device work? This

first model failed after a few days, and two years passed before the pacer looked reliable enough for human trials.

On April 15, 1960, a chance came: a patient in desperate need was at hand—a 77-year-old man who for a year had suffered blackouts with increasing frequency. In one, he had fallen and fractured his skull. Life for him could be measured in a few fear-laden months. Dr. Chardack decided to install a pacemaker.

The immediate response was eye-opening. Drowsiness, fatigue and chest pain disappeared; mental alertness returned. The patient was able to resume activities normal for his age: gardening, walking, a quiet social life. For two and a half years the pacer performed faithfully, until the tired old heart gave out. "The pacemaker," observes Dr. Chardack, "is not a new heart. It is merely a new electrical system; the motor remains the same."

Dozens of patients now began getting implanted pacemakers. A middle-aged man was restored sufficiently by a pacer to return to work in a steel mill. An 18-month-old baby was given one, and is alive today as a result.

Difficulties inevitably arose. Initial calculations that batteries would last five years proved optimistic. Most surgeons now replace them after three years. This involves only minor surgery performed under local anaesthesia.

Because the wires implanted in the heart flex with each heartbeat—60 times a minute, 84,000 times a day—breakages occurred. Many early patients required a second chest operation to implant new electrodes. But this problem appears to have been solved by sturdier wires and improved means of implantation.

Surgical techniques for implanting a pacer vary. In one widely-used operation the chest is opened between the fourth and fifth ribs. The left lung is then collapsed and pushed aside, exposing the heart. Next, a small incision is made in the abdomen and from it, via a tunnel underneath the skin, wires are snaked upward to the heart. Electrodes are then stitched into the ventricle wall. In a few weeks scar tissue will seal them tightly into place. In the final step an abdominal pocket is made to hold the pacemaker. Then all wounds are closed. The surgery takes an hour to an hour and a half; ten to 14 days later the patient is ready to go home.

As the heart settles into an even rhythm and blackouts cease, the patient's oppressive fears vanish. "I have seen few people so grateful or so completely rehabilitated as those who have been given heart pacers," says Dr. Chardack. Indeed, one of the greatest problems is to restrain such patients. They often forget that they still have severely damaged hearts.

Pacers have been implanted in heart-block patients both in Britain

and on the Continent. The work of Britain's pacemaker pioneers—the cardiac team at St. George's Hospital, London—was watched by millions in the BBC-Television programme "Your Life in Their Hands" last April. One of the 75 whose lives have been transformed by a St. George's pacemaker is 59-year-old George Prevost, whose heart trouble began nine years ago after a traffic accident in Fleet Street. His pulse rate dropped to 18 and one blackout merged into another. Last February a pacemaker was implanted in the tissues of his anterior abdominal wall. Within a fortnight, this small determined man, known at St. George's as "the tough little guy," was out of hospital. He has since returned to his work on the staff of *The Sunday Telegraph*.

Recent strides in pacer technology have been enormous. In America, General Electric, working with Dr. Kantrowitz and the Maimonides Hospital group, has produced a pacer whose rate can be adjusted from the outside. A frequency emitter is placed against the skin, over the implanted pacer. A dial can then set the heart-beat at any desired level between 60 and 120. Some users slow their hearts on going to bed, step up the pace on rising. One woman, a devoted cyclist, likes a beat of 80 while on her bike. Some like a faster clip for parties or business engagements.

In prospect is a striking development—the batteryless pacer, using the body's own electrical output for power. Physicists have long known that electrodes of dissimilar metals immersed in conducting fluid will pick up a feeble electric current. Working with rats, General Electric researchers placed one electrode in the abdominal cavity, another under the skin—and picked up enough power to run a small radio transmitter! The same idea, they think, may soon be used to eliminate the need for batteries in pacers.

Since all body activity is partly electrical in nature, extensions of the pacer idea are almost limitless. Says Dr. Kantrowitz: "The integration of electronic circuits as functioning permanent parts of human beings is going to be a very important field in the next ten years." There is, for example, a prospect of using rhythmic electrical stimulation to activate paralysed muscles—perhaps freeing some people from iron lungs, enabling others with paralysed legs to walk.

The extraordinary advances in providing a new ignition system for ailing hearts will almost certainly be dwarfed by the applications of pacer technology that lie just ahead.

THE NICE thing about a gift of money for Christmas is that it's so easily exchanged. —Arnold Glasow



Painted in Darkness

The remarkable story of an artist who did not discover his talent until he had gone totally blind

By C. W. E. Jordan with Arthur Gordon

One grey October morning, six years ago, I was lying in bed reading. Suddenly inside my head there was a brilliant flash. The book I was reading disappeared. The room itself disappeared. I found myself in a cage of darkness.

I should have been prepared for this. Glaucoma had already taken the sight of one eye, and doctors had warned me that the other eye was affected. But I had the irrational feeling that if I simply ignored it, the grim thing that was stalking me would never strike.

All the way to hospital I kept telling myself it was just a momentary blackout. I clung desperately to this hope until doctors took it away. Then I went down into a pit of misery.



ANDREW BELL

C. W. E. Jordan

All my life I had prided myself on my independence. Now it was gone. My work, as travelling auditor for a chain of hotels, was gone. At 62, with no close relatives, no established home, I was alone, lost in impenetrable blackness.

For weeks, time stood still. Hands touched me, voices spoke, but they seemed far-off, unreal. Sometimes I would sit motionless for hours, silent as a stone.

When the time came for me to

leave hospital, I was terrified. There would be a small pension, but otherwise I had no funds, nowhere to go. I was living in a little town in West Virginia where I scarcely knew anyone. In the end I decided to go back to Savannah, in Georgia, a town where I had once lived and had a few friends.

In Savannah a small miracle happened. I thought I might try to do some writing, and so I advertised for a part-time secretary. I explained in the advertisement that I was blind and could pay very little. Even so, there were 40 applicants for the job. I chose the one with the gentlest voice; her name was Dorothy. At first, I'm sure, she simply pitied me. But pity turned to love. In time, we were married.

So I was alone no longer. Even so, there were moments when I felt that I had simply dragged Dottie down to my own private hell. My attempts to write were a failure; the black emptiness behind my eyes seemed to confuse my brain and sometimes when Dottie tried to comfort me I would lash out at her.

One day, after such an episode, she said patiently, "I'm going out for a while. Here's a pad and pencil; perhaps you'll feel like trying to make some notes."

When she was gone, I sat there wondering what I could do to make amends. With the pencil I made a mark on the pad and drew my fingers across it lightly. My fingertips were more sensitive, now; I could feel the indentation clearly. Too bad, I said to myself, that you never learned to draw. You could at least have tried to sketch something for her.

It was true: I had never tried to draw or paint in my life. But now I remembered an etching I had once admired, a tide-water scene with a sweep of tawny marshes backed by a dark pine forest. Well, I thought, it can do no harm to try.

When Dottie returned and I handed her the pad, she was silent. "Who did this?" she asked at last. When I told her, she said in a whisper, "If anyone saw this, they'd say you're not blind!"

I began another sketch to show her how I had done the first one, measuring intervals and marking them with my thumbnail, drawing lines, tracing the indentations with my fingertips, filling in light and shade between two fingers laid flat against the paper. It was a strange thing: as I worked, the darkness that imprisoned me was empty no longer. I was *seeing* again, seeing with my memory instead of my eyes.

From that moment, I began to live once more. Day after day I worked at my drawing, sustained by the thought that perhaps I was attempting something unique. I made endless mistakes. But each one was a challenge, and it is in responding to challenge that a man knows for certain that he is alive.

My technique evolved slowly and

painfully. First I would concentrate on a subject for hours, sometimes days, until I could "see" the image accurately in my mind, in all its detail and colour. For the basic sketch I used an ordinary soft-lead pencil. It made a wide line that was easy to feel. I always worked from the centre outwards. If I was attempting a still life of flowers, for example, I might centre the first flower exactly. For landscapes I would start off-centre with a house or a boat or a tree, or other important object, and work outwards from that.

When the drawing was finished, I would tackle the colouring. I bought oil-base pencils and devised a holder for them with five rows of holes, six holes in each row. I asked Dorothy to put the greens in the first row, the darkest shade on the left, next darkest shade in the second hole, and so on. In the other rows she did the same with blues, browns and greys.

The fifth row held miscellaneous other colours needed for a particular picture: I memorized that row each time.



Trees and flowing water, a scene recreated by the artist from memory

I could feel the lines of my drawing with the tip of the colouring pencil, and learned with practice to avoid running over. Also, I could tell what colour had been applied and where. Different colours, because of the pigments they contain, have a different feel. (Prussian blue, for example, has a harsh, grainy texture almost like sandpaper, while true blue is quite smooth.)

Gradually my techniques improved, but I encountered other problems. Often when I tried to choose a subject, nothing with the necessary vividness would occur to me. Or the recollection would seem faint and imperfectly imprinted on my mind. Why, I asked myself, had I been so blind before I was blind? At times I wanted to cry out to everyone who could still see: "*Use* your eyes! Be hungry, be alive, reach out for new experience. Seize upon the beauty around you; keep it with you in your mind; never take it for granted!"

As time went on, I devised techniques to restore the intensity of my memories. Every morning when I

awoke I would lie quietly and command the past to present itself for review. With all my strength, I tried to select and remember images.

Thus I brought back the day I stood on top of a mountain and stared down at the vast tapestry of countryside, no two fields the same colour, no two rivers the same curve. I remembered how a cypress swamp looked in the moonlight, and the white-maned fury of the Atlantic in a north-easter.

When I had recaptured enough of a scene in my mind, I would try to put it on paper.

I found that on the average it took me about eight or ten hours to sketch a scene, once I had visualized it clearly, and perhaps twice that long to colour it. But on some I worked for months. Altogether I have made over 900 drawings, have sold some, and given many away.

People came to see what I had done. One man from New York wanted to buy exclusive rights to all I might produce.

These last few years have passed quickly. Dottie and I have a son, a two-year-old so lively and inquisitive that I have to keep my crayons on top of the piano. One day he switched them round, and I ended up with a forest of purple trees.

There are still limitations in my life, of course. Yet it is a good life and I am grateful for it. I'm not a conventionally religious man, but I can't help feeling there was a purpose behind these last six years—if only to show that limitations are never as final as at first they seem. They may cause a man to lose heart, lose even the desire to go on. But if he can just hang on, something inside him finally stirs, reaches upwards for new life—and finds it!

Small Talk

A SUBURBAN father, preparing to do some household job, warned his little daughter that she might hear some four letter words should he hammer his fingers. "I know one of them," she said.

The father winced.

"Help," she said.

—M. T.

A MAN who works in a magazine's advertising department thinks he must have been talking shop too much at home. He took his four-year-old daughter on a nature walk, showing her the insects, birds and so on. At one point she asked, "Daddy, are spiders and octopuses put out by the same company?"

—Jerome Beatty



The Scotty Who Knew Too Much



By James Thurber

Several summers ago there was a Scotty who went to the country for a visit. He decided that all the farm dogs were cowards, because they were afraid of a certain animal that had a white stripe down its back. "You are a pussycat and I can beat you," the Scotty said to the farm dog who lived in the house where the Scotty was staying. "I can beat the little animal with the white stripe, too. Show him to me." "Don't you want to ask any questions about him?" said the farm dog. "No," said the Scotty. "*You* ask the questions."

So the farm dog took the Scotty into the woods and showed him the white-striped animal and the Scotty closed in on him, growling and slashing. It was all over in a moment and the Scotty lay on his back. When he came to, the farm dog said, "What happened?" "He threw vitriol," said the Scotty, "but he never laid a glove on me."

A few days later the farm dog told the Scotty there was another animal all the farm dogs were afraid of. "Lead me to him," said the Scotty. "I can beat anything that doesn't wear horseshoes." "Don't you want to ask any questions about him?" said the farm dog. "No," said the Scotty. "Just show me where he hangs out." So the farm dog led him to a place in the woods and pointed out the little animal when he came along. "A clown," said the Scotty, "a push-over," and closed in, leading with his left and exhibiting some fancy footwork.

In less than a second the Scotty was flat on his back, and when he woke up the farm dog was pulling quills out of him. "What happened?" said the farm dog. "He pulled a knife on me," said the Scotty, "but at least I have learnt how you fight out here in the country, and now I am going to beat *you* up." So he closed in on the farm dog, holding his nose with one front paw to ward off the vitriol and covering his eyes with the other front paw to keep out the knives. The Scotty couldn't see his opponent and he couldn't smell his opponent and he was so badly beaten that he had to be taken back to town and put in a nursing home.

Moral: It is better to ask some of the questions than to know all the answers.



Eleanor Roosevelt, My Most Unforgettable Character

By Emma Bugbee

Y OUR PLANE from New York droned towards Washington that December afternoon, I sat studying with affectionate wonder the tall woman in the adjoining seat. Although I had known her for several years, I never ceased to be amazed at how much she could accomplish, even during a flight. When we first took off, she had been reading some reports. Then she chatted animatedly with other passengers who had come up to greet her. Now she was writing busily on some copy paper she had borrowed from me. She was Mrs. Franklin D. Roosevelt, the First Lady of the United States, and I was a newspaper reporter assigned to cover her activities.

When we landed at the chilly Washington airport I said good-bye, planning to take a taxi to an hotel.

"Emma, dear, I can't bear to think of you all alone in an hotel room tonight," she said suddenly. "Why don't you stay with me?"

So, my night was spent not in an hotel room but in the Rose Suite of the White House, with President and Mrs. Roosevelt as my host and hostess at a week-before-Christmas dinner. The impulsive warmth and kindness of this spontaneous invitation were completely typical of Eleanor Roosevelt. She was

DETAIL FROM PORTRAIT BY DOUGLAS CHANDOR

the greatest and at the same time the humblest woman I have ever known.

A Friend in Washington

WHEN MRS. ROOSEVELT entered the White House, she proved to be a totally new sort of First Lady. She dreaded the stiff social routine which the White House imposed on Presidents' wives, and feared it would curtail the welfare activities she considered so important. "I shall not toe the mark," she declared, in a masterpiece of understatement.

She brought a breezy informality and bustle of activity to the White House. At the Inaugural buffet, the President waited his turn to be served like anyone else, and Mrs. Roosevelt helped with the serving. She also horrified one of the staff by insisting immediately on operating the lift herself. "That just isn't done, Mrs. Roosevelt," he protested.

"It is now," she said, slipping in alone and closing the door.

During her first day at the White House, a woman-reporter colleague of mine telephoned and asked for Mrs. Roosevelt's secretary, Malvina Thompson. "Miss Thompson isn't in," a voice replied. "May I help?"

"Who is that?" asked the reporter.

"Mrs. Roosevelt," was the reply.

The startled reporter protested that she didn't want to trouble the First Lady, but Mrs. Roosevelt insisted on personally getting her the information she wanted. "You may call me any time," she said.

One of her first innovations on entering the White House was to hold press conferences—a move that she calculated rightly would create jobs for women reporters. After the first conference, I mentioned to Mrs. Roosevelt that I was being returned to my office in New York and therefore, regretfully, would not have a chance to see the upstairs rooms of the White House (which the public never saw), where future press conferences were to be held

"Well, then, come to lunch tomorrow, and bring the other New York newspaper girls," she said. "It will be my farewell to my first press group."

The next day she led five of us on a tour of the upper rooms. "It is not my house. It belongs to the people," she said. "They have a right to know about it." So, we described the great house at length in our stories the following day. That lunch was the turning point of my career; thereafter I became a specialist in the activities of this amazing First Lady.

Mrs. Roosevelt often took taxis, went by underground, or simply walked, with her long loping

EMMA BUGBEE, a staff reporter of the New York *Herald Tribune* for more than half a century, covered Mrs. Roosevelt's activities for nearly 40 years. She won a 1963 award from the Newspaper Reporters Association of New York for her moving profile of Mrs. Roosevelt the day after her death.

strides. Occasionally, she even accepted a lift from some stranger who recognized her. Only in later years did she bother with her own car and chauffeur.

She was the despair of the Secret Service, but she would not have a bodyguard. After President-elect Roosevelt narrowly escaped death at the hands of an assassin who killed Mayor Cermak of Chicago, he urged her to accept protection. "Nobody's going to shoot me," she scoffed. "I'm not that important." The frustrated Secret Service then insisted that she carry a revolver, which she grudgingly learned to use. However, she usually forgot to carry it

Washington had never seen anything quite like her energy. She got up at dawn, went riding at 6 a.m., had breakfast at 7. By 7.30 she was busy at her desk. She wrote a syndicated newspaper column and articles for magazines. She joined a union (the Newspaper Guild). She took voice lessons, spoke on the radio, lectured (giving the money earned to charity)—all in addition to the formal duties of a First Lady. She moved about so quickly that White House servants sometimes had to trot alongside her to get in a word about household plans.

But no matter how hectic her schedule, she always had time for little acts of thoughtfulness. She worried about *us*, for instance—the corps of women reporters who covered her activities. Once when Ruby Black, correspondent for United Press, fell ill, Mrs. Roosevelt immediately noticed her absence and asked me where she was. I explained.

"I wonder if Ruby and her family would take our house at Campobello for a vacation?" she said.

They did, and Ruby returned reinvigorated.

Another time a small-town teacher who was bringing a boy crippled by polio to Washington wrote asking Mrs. Roosevelt's advice on what to see in the capital. Not only did Mrs. Roosevelt arrange a special tour of the city, but she put the boy up at the White House. Such episodes multiplied as the years went on. "I have never known a woman except Mrs. Roosevelt whose motives were always pure kindness," White House housekeeper Mrs. Henrietta Nesbitt said.

Her day didn't end when the sun went down. Late into the night, after everyone else in the White House was asleep, she would pore over her mail. She received bushels of it—in the first year more than 300,000 pieces It increased as her activities broadened, as her visits to hospitals, schools, migrant labour camps and industrial plants increased.

"I want people to write to me," she said. "I think it's important for people to feel that in the house where the government centres they have a friend."

A corps of secretaries helped with

the official letters, but the personal ones she answered herself in a loose, flowing hand. Critical letters she answered as cheerfully and faithfully as admiring ones. Once I met her on her return from a train trip to St. Louis. "I've had the most wonderful two days," she said. "I've had a chance to do all of my personal correspondence." She was as courteous as that throughout her life. When I went to Europe on holiday one year, I sent more than 100 postcards to friends. Only one person replied by mail—Mrs. Roosevelt.

"Aren't You Tired?"

PERHAPS the most incredible display of stamina I have ever witnessed occurred the day Mrs. Roosevelt visited Arthurdale, an experimental farm colony in West Virginia designed to help miners in the depressed coal industry.

It was 6.30 a.m. when we climbed off the train to be met by the entire town, complete with mayor, brass band, Boy Scouts, little girls with flowers, local bigwigs. Mrs. Roosevelt made a gracious speech. She made two more speeches before breakfast at the governor's home. Then followed a commencement address at the state university under a boiling midday sun. Then came the inspection of Arthurdale.

At 6 p.m. we reporters staggered on to the return train. But for Mrs. Roosevelt there were more welcoming villagers at every wayside stop, and more speeches. We were exhausted; she was exhilarated. "Wasn't it a wonderful day?" she asked. She had made 13 speeches!

At 10 p.m. she got up to go to her compartment with her secretary, Malvina Thompson. "This is all very pleasant," she announced, "but Tommy and I have work to do."

"Work!" we chorused.

"Oh, yes, we have three articles to write."

"Aren't you tired?"

"Oh, no," she said. "I'm never tired except when I'm bored."

Strangers were invariably surprised when they met Mrs. Roosevelt face to face for the first time. "Why, she's so much better looking than her pictures," they always said. What the pictures never conveyed was the soft colouring of her fair hair, her keen, friendly blue eyes, the warmth and patience of her personality.

This patience prevailed even when people who disliked President Roosevelt attacked him through her. Once, in Los Angeles, a man in the audience shouted, "Mrs. Roosevelt, do you think that being a cripple has affected your husband's mind?" There was a shocked silence at this cruel question. All eyes were on her.

"How could it be otherwise?" she replied. "One couldn't suffer as my husband has and fail to be affected. Suffering has made him more sensitive, more responsive to his fellow men."

Mrs. Roosevelt had considerable

influence on her husband, particularly by indirection. Because of the press of duties, F.D.R. saw mainly official, important people. She wanted him to meet all kinds, and so there was always a stream of guests in and out of the White House. She gave a garden party for the inmates of a girls' reform school; she invited actors, labour leaders, reporters, professors.

"Lady, This Is a Free Country"

SHE INFLUENCED her husband, too, by acting as a lively sounding-board and a frank critic. Frequently, when faced with some thorny issue, F.D.R. would bring it up at dinner and provoke his wife into expressing her opinions. Once he baited her so sharply on a problem that she became furious and gave vent to her feelings heatedly, while he smilingly advanced contrary views. The next day she was thunderstruck to hear him blandly quoting her remarks to the British Ambassador as *his* views.

Often her ideas outraged people, but Roosevelt did not try to restrain her. "Lady," he said, "this is a free country. Say what you think. Anyway, the whole world knows I can't control you."

As with all wives, there were also moments when Mrs. Roosevelt was less than frank. Once, rather than approach her husband direct for money needed to pay an especially large bill, she sent a note to his secretary, "Missy" LeHand. In it she said, "I know F.D.R. will have a fit." Roosevelt happened to see the message while Miss LeHand was out. When she returned, she found written across it: "Pay it. Have had the fit. F.D.R."

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But the story was far from over. Indeed, a new and perhaps even more fulfilling chapter of her life was about to unfold. President Truman appointed her a delegate to the first Assembly of the United Nations, meeting in London in 1946.

Within months she had proved herself a well-informed and vigorous debater, and both friend and foe came to recognize her achievements. When she walked through the General Assembly in Paris in 1948, after its passage of the Declaration of Human Rights, which she had patiently shepherded for three years, the entire body of hundreds of delegates rose and gave her a rousing ovation.

In this new job, she got about 1,000 letters a week, most of them from ordinary people or obscure organizations. Nearly all asked for help. One might be a request to plead some cause before the U.N., the next an appeal to find an errant

husband. They were usually answered late at night after a full day of work and one or more diplomatic functions in the evening. People all over the world who had problems and did not know to whom to appeal inevitably thought of Mrs. Roosevelt.

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She also continued to write her column, "My Day," and to make radio and television appearances. She even made a television commercial for a margarine, thereby stirring up another blizzard of letters. "The mail was about evenly divided," she said. "One half was sad because I had damaged my reputation. The other half was happy because I had damaged my reputation." But her favourite charity needed the money, and a new television audience heard her pleas for peace and democracy.

She was as vigorous as ever. She rose at 7 a.m. and was usually busy until after midnight. She gave up cold showers and physical jerks, but made her own bed, turning the mattress each day to get extra exercise. "I look like Methuselah," she said, "but I feel no older than my youngest friends."

On my 50th anniversary as a reporter for the New York *Herald Tribune*, my colleagues gave a little surprise party for me at the office. Suddenly a tall, familiar figure came rushing into the room. Mrs. Roosevelt, of course. She made a charming little speech about the many years that I had covered her activities. She had a dozen important things to do, but, as always, she fitted in the kindly gesture.

The Friend Is Lost

AFTER SHE passed the Biblical three-score and ten years, Mrs. Roosevelt circled the globe three times, interviewed Khrushchev in Russia, faced a Communist mob in India, swam with Tito at his island hideaway.

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"I think I have a good deal of my Uncle Theodore in me," she said on her 77th birthday, "because I could not, at any age, be content to take my place in a corner by the fireside and simply look on. Life was meant to be lived. One must never turn his back on life."

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She then bolted down a long stairway, too impatient to wait for the lift. It was the last time I saw her.

Eventually, her seemingly inexhaustible energy began to flag. She had developed anaemia. But her spirit rebelled at the idea of ill health, and she obeyed her doctor's orders only sporadically. The New York State Democratic primary campaign of 1962 found her again at the hustings, enlisted in the reform ranks against the "bosses." In late August she went on a sound relay van to the far reaches of New York City's boroughs. She had a temperature of 102, but made five short speeches. At one place a little girl gave her an armful of flowers. "You see, I had to come," Mrs. Roosevelt said to a friend. "I was expected."

The next day she went to Hyde Park to rest. She thought she "must have picked up a germ." Actually, she was suffering from a rare type of bone-marrow tuberculosis, and her 78th birthday, on October 11, was spent in hospital. Then, on November 7, she died.

She was laid to rest beside her husband in the rose garden at Hyde Park on a blustery autumn day. Lead-grey skies settled like a gentle pall over the paths where I had once walked with her. At her graveside were three Presidents of the United States. There were also people from all over the world, some from nations whose existence had never been dreamed of in her youth, but who now mourned her as their friend.

"What other single human being has touched and transformed the existence of so many others?" asked Adlai Stevenson. "What better measure is there of the impact of anyone's life?"

Even as her life had ebbed painfully away there had been time for small kindnesses. A few days after Mrs. Roosevelt's death, a housewife received a cheque for ten dollars. The woman was the daughter of a hitchhiker Mrs. Roosevelt had once picked up. He had been out of work, and she had found him a job. Gratefully, he said that if he ever had a daughter he would name her after the First Lady. When the man did have a daughter, Mrs. Roosevelt asked to be the godmother. She saw the girl only a few times.

The girl grew up and married. Each birthday she received a ten-dollar cheque from Mrs. Roosevelt. The last came on November 10. The signature was a feeble but legible "A. E. Roosevelt." It was posted the day before she died.

"That was the kind of woman she was," the housewife said. "She never forgot."

A YOUNG company executive ruefully admitted a too-hasty decision. "I'm bleeding," he said, "from the spur of the moment." —*T.J.N*

You'll Be Puzzled...

By Martin Gardner

THE BICYCLES AND THE FLY

Two boys on bicycles, 20 miles apart, began racing straight towards each other. The instant they started, a fly on the handlebar of one bicycle started flying straight towards the other cyclist. As soon as it reached the other bicycle, it turned and started back. The fly flew back and forth in this way, from handlebar to handlebar, until the bicycles met.

If each bicycle had a constant speed of ten miles an hour, and the fly flew at a constant speed of 15 miles an hour, how far did the fly fly?

Solution

Each bicycle travels at ten miles an hour, so the two will meet at the centre of the 20-mile distance in exactly one hour. The fly travels at 15 miles an hour, so at the end of the hour it will have gone 15 miles.

Many people try to solve this problem the hard way. They calculate the length of the fly's first path between bicycles, then the length of his path back, and so on for shorter and shorter paths. But this involves what is called the *summing of an infinite series,* and it is very complicated, advanced mathematics.

It is said that John von Neumann, perhaps the greatest mathematician in the world when he died in 1957, was once asked this problem at a cocktail party. He thought for a moment, then gave the correct answer. The person who asked the question looked a bit crestfallen; he explained that most mathematicians overlook the simple way it can be solved and try to solve it by the lengthy process of summing an infinite series.

Von Neumann looked surprised. "But that's how I solved it," he said.

THE THREE TIES

Mr. Brown, Mr. Green and Mr. Black were lunching together. One wore a brown tie, one a green tie, one a black.

"Have you noticed," said the man with the green tie, "that although our ties have colours that match our names, not one of us has on a tie that matches his *own* name?"

"By golly, you're right!" exclaimed Mr. Brown.

What colour tie was each man wearing?

Solution

Mr. Brown had a black tie.

Mr. Black had a green tie.

Mr. Green had a brown tie.

Brown couldn't be wearing a brown tie, for then it would correspond to his name. He couldn't be wearing a green tie because a tie of this colour is on the man who asked him a question. So Brown's tie must be black. This leaves the green and brown ties to be worn respectively by Black and Green.

LOW FINANCE

"I seem to have overdrawn my account," said Mr Green to the bank manager, "though I can't for the life of me understand how it could have happened. You see, I originally had £100 in the bank. Then I made six withdrawals. These withdrawals add up to £100 but, according to my records, there was only £99 in the bank to draw from. Let me show you the figures."

Mr. Green handed over a sheet of paper on which he had written:

WITHDRAWALS	AMOUNT LEFT IN ACCOUNT
£50	£50
25	25
10	15
8	7
5	2
2	0
£100	£99

"As you see," said Mr. Green, "I seem to owe the bank a pound."

The bank manager looked over the figures and smiled. "I appreciate your honesty, Mr. Green. But you owe us nothing."

"Then there is a mistake in the figures?"

"No, your figures are correct."

Can you explain where the error lies?

Solution

There is no reason whatever why Mr. Green's original deposit of £100 should equal the total of the amounts left after each withdrawal. It is just a coincidence that the total of the right-hand column comes as close as it does to £100.

This is easily seen by making charts to show a different series of withdrawals. Here are two possibilities:

WITHDRAWALS	AMOUNT LEFT IN ACCOUNT
£99	£1
1	0
£100	£1

WITHDRAWALS	AMOUNT LEFT IN ACCOUNT
£1	£99
1	98
1	97
97	0
£100	£294

As you see, the total on the left must always be £100, but the total on the right can be very small or very large.

Helpless Little Thing?

By Marcia Winn

Why is it that everyone refers to a baby as a helpless little thing? Give a baby a home of his own, and he is the least helpless object in it. All he needs to do to have his every want filled is to let out one small peep. If help does not come at once, he need only extend this peep into a wail. And by forcing a bellow, he can throw the entire household into a tailspin from which it may not emerge for days.

He can't walk, he can't talk, he can't feed or bathe himself, and in that he has an unmixed blessing. Unable to walk, he can lie in bed all day and kick his legs—the envy of every adult who sees him. Unable to talk, he need never answer unnecessary questions, become involved in a political argument or politely tolerate a bore. When oppressed by the last, he can turn his head the other way, go to sleep, and have his actions approved by polite society.

He need never worry over what he is going to wear today or what he will eat for lunch. If he doesn't wear a stitch, he is perfectly content, and no one will raise an eyebrow. If he doesn't like his food, he can spit, blow or bubble it out, no matter who is watching, or he can disdain to eat at all. He can emit, at the end of a meal, a resounding belch, and be applauded for what later will be considered most unseemly.

Soon the world at large will criticize the way his hair grows, although now his admirers are enchanted because it grows at all. It will criticize the way he eats, although now all are ecstatic if he gets it down any way. If he turns out to be beautiful, good, rich or successful, part of the world will envy him; and if he turns out to be ugly, bad-tempered, poor or a failure, the other part of the world will berate him. But now, probably for the last time in his life, he is eulogized by poets, chucked under the chin by old ladies, cooed at by Scrooges and adored by all.

Far from being helpless in this world, he is the only human being who can turn it to good use. It wasn't idle conversation that prompted a doctor to muse, "In the next life I'm going to be a perpetual baby."

Condensed from Chicago Tribune

Her true story is in many ways more fascinating than the legends that have surrounded her name for 2,000 years

THE REAL CLEOPATRA



PETER MICHAEL FIX

Relieved to be a likeness of Cleopatra, this limestone bust in the British Museum is one of our only clues to her appearance

By Don Wharton

CLEOPATRA is usually thought of as an Egyptian siren, a wanton seductress, who killed herself for love of the Roman general Mark Antony. Little of this is true. Although Cleopatra was queen of the ancient kingdom, not a drop of Egyptian blood flowed in her veins.

She was a Macedonian Greek; her Egyptian capital, Alexandria, was a Greek city, and her court language was Greek. Her dynasty had been founded by Ptolemy, a Macedonian general of Alexander the Great, who, after Alexander's death, seized Egypt and made himself king.

Condensed from U.S. Lady

As for her wantonness, not a shred of evidence connects Cleopatra with any man except Julius Caesar and, three years after his death, Mark Antony. These were not idle liaisons but open unions, approved by her priests and recognized in Egypt as marriages. The idea that she was a voluptuary who employed all her wiles to seduce these men is absurd. Julius Caesar, some 30 years her elder, had had four wives and countless mistresses. His soldiers called him the "bald adulterer" and sang a couplet warning husbands to keep their wives under lock and key when Caesar was in town. Mark Antony, 14 years older than the little queen, was also a noted philanderer. And in the end it was not because of love for him that Cleopatra killed herself, but out of a desire to escape degradation at the hands of another conqueror.

Yet the legend has persisted for 2,000 years, chiefly because poets and playwrights, including Shakespeare, emphasized her physical charms and passion rather than her brains and courage. Her deeds, however, reveal her as a brilliant, resourceful woman who spent her life in a battle to keep her country from being swallowed up by the Romans.

Born in 68 or 69 B.C., Cleopatra grew up amid palace intrigue and violence. Her father, Ptolemy XI, was a drunkard, an orgiast and a flute player. He died when Cleopatra was 18, and she then became queen, ruling jointly with her ten-year-old brother, Ptolemy XII. Two years later the young Ptolemy, dominated by a trio of palace schemers, forced Cleopatra into exile in Syria. Showing the spirit which was to characterize her life, she promptly raised an army and started to march back across the desert to fight for her throne.

This was the Cleopatra whom Caesar met in the autumn of 48 B.C. He had come to Egypt in pursuit of the Roman general Pompey, his adversary in a struggle for political power—the kind of struggle that was to keep Rome in turmoil for almost a century.

What did Cleopatra look like? The only clues are a few coins stamped with her profile, and a bust dug from Roman ruins some 1,800 years after her death. They show an aquiline nose, a beautifully formed mouth with finely chiselled lips. A number of ancient historians wrote of her "ravishing beauty," but they were not men who had actually seen her. Perhaps the most accurate description is by Plutarch, whose grandfather was told about Cleopatra by a physician acquainted with one of the royal cooks. Plutarch wrote that her actual beauty "was not in itself so remarkable that none could be compared to her."

All early writers agreed, however, on her "fascinating" conversation, her lovely voice, "her adroitness and subtlety in speech."

She spoke six languages, was well acquainted with Greek history, literature and philosophy, a shrewd negotiator and apparently a first-rate military strategist. She also had an ability to dramatize herself. When summoned by Caesar to leave her troops and come to the palace he had taken over in Alexandria, Cleopatra slipped into the city at dusk, had herself tied up in a roll of bedding and, thus concealed, was carried on an attendant's back through the gates to Caesar's apartment.

Whether her stratagem was to elude assassins in her brother's hire, or to impress Caesar, it was one of the most dramatic entrances of all time. Her courage and charm helped to convince Caesar that it would be politic to restore her to her throne. And she became pregnant very soon after their first meeting.

Possibly to impress Caesar with Egypt's wealth, Cleopatra the next spring organized a huge expedition up the Nile. For weeks she and Caesar floated along in an elaborate houseboat, accompanied by 400 vessels carrying troops and supplies. Then, in June, Cleopatra gave birth to a son, Caesarion—Greek for Little Caesar. The infant, his father's only son, seems to have been the root of an ambitious plan for Caesar and Cleopatra to merge Rome and Egypt into one vast empire to be ruled by them and their line.

Promptly on the birth of the boy, Caesar left Alexandria and began military operations in Asia Minor and North Africa, mopping up all remaining opposition. Within a year he returned triumphantly to Rome—undisputed dictator. Cleopatra was there with Caesarion, established by Caesar in a magnificent villa.

As a queen with a royal court, Cleopatra began to exert her influence on Roman life. She brought coiners from Alexandria to improve the Roman mint, financiers to arrange Caesar's economic programme. Her astronomers reformed the Roman calendar, creating the one on which our modern system is based. Caesar had her statue placed in a new temple built to honour Venus, and he issued a coin on which Venus and Eros could be recognized as Cleopatra with Caesarion in her arms. His power seemed absolute. Then suddenly, 20 months after Cleopatra came to Rome, Julius Caesar was a corpse—murdered on the Ides of March.

Was Cleopatra grief-stricken? No one knows. After a month she sailed back to Egypt. Historians have no facts about the next three years of her reign except that, in the power struggle that now plunged Rome into civil war, the contenders sought her aid. Apparently her policy was one of cautious waiting to see who was to become Caesar's successor.

When Mark Antony emerged as the strong man of the East, he bade Cleopatra meet him at Tarsus. For

a time she ignored his summons; then she set sail with a splendid fleet, carrying gold, slaves, horses and jewels. At Tarsus, instead of going ashore as a suppliant, Cleopatra coolly waited at anchor. After she had adroitly manoeuvred Antony into becoming her guest, she confronted him with a dazzling spectacle: the galley's silver-tipped oars beating time to the music of flutes and harps, its ropes worked by beautiful slaves dressed as sea nymphs and graces, censers pouring out exotic perfumes. Reclining under a gold awning was Cleopatra garbed as Venus, fanned by young boys resembling cupids.

When the banquet was over, Cleopatra presented Antony with the gold plate, elaborate drinking vessels, sumptuous couches and embroideries used for it. The next night she entertained Antony and his officers again, and on their departure lavished similar gifts on each guest. Her goal was not to gain Antony's affections but to impress upon him the limitless wealth of Egypt, hence its potentialities as an ally.

Three months later Antony came to Alexandria, and spent the winter there. He left in the spring, six months before Cleopatra bore their twins, and did not see her again for nearly four years. Cleopatra meanwhile strengthened her country's defences, built up her navy, amassed gold and supplies. When Antony, hoping to extend his power in the East, asked her to meet him in Syria, she came as a determined bargainer. She extracted an agreement whereby Egypt would be given all the vast areas the Pharaohs had possessed 1,400 years before, but which were now Roman provinces. Antony also agreed to a legal marriage, and in celebration of this event coins were struck bearing their two heads. At that time Cleopatra began a new dating of her reign.

Now 33, she set out with Antony to make war on the Persians, but at the Euphrates she had to give up the campaign. She was pregnant again. The child arrived in the autumn, and that winter there came desperate appeals from Antony: his army had been cut to pieces, and the haggard remnants had barely escaped to the Syrian coast. Cleopatra, with money, supplies and weapons, sailed to his rescue.

The next year, 35 B.C., she had to use all her wiles to keep Antony — his mind clouded with prolonged drinking—from attempting another invasion of Persia. Realizing that their true enemy was Octavian, Caesar's nephew and legal heir who from Rome dominated the West, she urged Antony to concentrate on his overthrow In 32 B.C. she precipitated war, with Octavian by persuading Antony to take two steps: issue a writ divorcing his other wife, Octavia (Octavian's beautiful sister), and order troops to cross the Aegean Sea into Greece.

Cleopatra was now at her peak,

with vassal kings from the Middle East paying her court, the Athenians showering her with honours, hailing her as Aphrodite and erecting her statue in the Acropolis.

Then, at Actium on the west coast of Greece late in the afternoon of September 2, 31 B.C., everything crumbled. Historians have never agreed about this crucial battle: why Antony, with a superior army, let it become a naval engagement; or why Cleopatra, with the sea fight raging and the outcome still undecided, hoisted sail and made off downwind for Egypt with her 60 warships; or why Antony left his huge army behind, boarded her ship and sailed away with her.

At home, when news of the disaster spread, Cleopatra firmly put down all disaffection. She tried to strengthen ties with neighbouring countries. She also began transferring warships from the Mediterranean to the Red Sea—a stupendous project which involved dragging them across miles of desert.

When Octavian's troops arrived and Egypt's frontier forts fell to them, Cleopatra remained in Alexandria, prepared to bargain with Octavian or do battle with him. But when the invading army closed in, the queen's navy and cavalry deserted. Antony killed himself. Taken alive, Cleopatra was put under guard and warned that if she killed herself her children would be put to death.

Though Octavian promised clemency, Cleopatra assumed that her fate would be like that of hundreds of other royal captives who had been paraded in chains through the streets of Rome, then executed. Audacious to the end, she pretended to abandon all thought of suicide. Securing permission to visit Antony's grave, she apparently made contact with faithful followers as her litter was carried through the streets.

She returned to her quarters, bathed, dined and ordered her attendants to dress her as Venus. Of what happened next we know only this: Roman officers breaking into her quarters found Cleopatra dead. According to legend, the queen had allowed herself to be stung by an asp smuggled to her in a basket of figs.

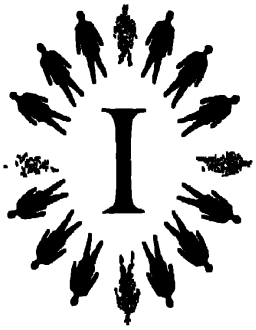
When Octavian's conquest of Egypt was celebrated in Rome, a statue of Cleopatra was dragged through the streets with an asp clinging to one arm. Her three children by Antony—Caesarion had been executed—were forced to march in the degrading procession. It was then that Roman poets, to court favour with the victor, began to spread the myth of a wicked and licentious Egyptian queen, the myth which continues to this day.

JANUARY 2 is when most people find that it's easier to break a resolution than a habit. — *Farm Journal*

With a "new look" and a soft sell, the Italian Communist Party is trying to hoodwink the people into believing that it is truly interested in democracy

The Winning Ways of Italian Communism

By Ernest Hauser



ITALY'S Communists are happy. Last April the Communist Party piled up 7·7 million votes, a million more than it polled in 1958. A few days after the elections the party organ, *l'Unità*, printed a picture of a crowded street in Italy in which one in every four people was coloured red. No one could argue with that kind of bragging; fully a quarter of the Italian electorate *had* voted Communist.

What can it mean? The United States, since the war, has poured nearly 6,000 million dollars' (Rs. 2,850 crores) worth of aid into Italy. Partly as a result of this priming, Italy's output has doubled in the last ten years, and is now rising at a faster rate than that of any other European country. Perhaps the notion that prosperity is the best bulwark against Communism is fallacious? And what about that other bulwark—religion? How, in this almost solidly Catholic country, could millions of men and women endorse an atheistic philosophy?

While such questions are being pondered, the possibility of an eventual Red takeover of Italy by democratic means no longer seems unthinkable. Italy's Communist Party has a card-holding membership of 1·7 million—the largest in the West. It is also the best-organized and most ably run. With 166 Communists in the 630-member Chamber of Deputies, and another 85 in the 315-member Senate, the

party casts a long red shadow on the Italian legislature. The powerful General Federation of Labour (CGIL) is a Communist fief, with ranking party officers in key positions.

Add to all this the party's following among Italian intellectuals and scientists; its string of publishing concerns; a lively batch of Communist-front organizations —and what you get is certainly something to be reckoned with.

Functioning as a state within the state, the Italian Communist Party has created a political machine that reaches into the remotest corner of the country. At the bottom of the complex structure are 41,100 cells—small groups of comrades working in the same factory or office or living in the same street. No one can be a party member without belonging to a cell.

Above the cells are 11,046 wards and, above them, 114 provincial federations. (The target, "a Red ward for every church steeple," is still distant; there are 30,000 parishes in Italy.) The pyramid is topped by the "Red Palace," also known as the "Little Kremlin"—a blood-red, six-storey cigar-box of a building housing the party's national headquarters in Rome. Here sits Palmiro Togliatti, the party's Moscow-trained chief and the ultimate repository of all power.

Now 70 years old, Togliatti is the most brilliant Communist outside the Iron Curtain, and possibly his country's ablest politician. *Il padrone* (the boss, as his associates call him) might easily be taken for a prominent businessman. His lively eyes and ponderous forehead give him an air of worldly wisdom. He speaks six languages, including Russian, and reads Greek and Latin texts for relaxation.

Under Togliatti's stewardship, Italian Communism has come a long way since the touch-and-go days of 1948, when party ruffians were running wild in the streets, machine-guns were mounted on the roofs, and factories were taken over by Red shock troops. Believing that revolution in this sunny land is doomed to failure, the party has in recent years adopted a "new look."

"We must present ourselves," Togliatti instructed a group of party functionaries, "as a party of the Italian nation—a party that wants, defends and fosters democracy. We must make people understand that here there will always be farm property of small and medium size, productive artisans, and small private enterprise. What we want, on the basis of the Italian constitution, is a new democracy in which many aspects of present-day Italian society will continue to exist."

It is a deceptive tune, hard to resist. With a flair for clever publicity, Red chiefs have cloaked their true aim with an image of respectability that looks attractive to Italians in every walk of life. In last April's elections, the party even

changed the colour of its campaign banners, from red to royal blue. But the change of wrapping in no way affects the merchandise. For all major policy decisions—whether on disarmament, Laos, Berlin or Cuba —the Italian comrades plug the Moscow line. And more than half the party's annual budget of some 13,000 million lire (about Rs. 10 crores)—over 20,000 million lire in an election year—is contributed by Soviet Russia.

Who votes Communist in Italy? First, anybody with a grievance against the government. Second, the peasants who, newly-arrived in the industrial cities, are easily impressed. In the seedy Vimodrone precinct, on the periphery of prosperous Milan, I came upon several hundred migrants—a droplet from the flow of nearly a million people who in the last ten years have trekked from the poor, backward south of Italy to the industrial north. At home they had been farm workers, earning 950 lire (about Rs. 7) a day—200 days a year. Up here, they could work on one of many building projects at 62,500 lire a month.

A young Communist took me round the helter-skelter of small houses where these workers live, mostly in miserable basement dormitories, paying about 5,000 to 6,500 lire a month for a bed. Then he guided me to a large corner building housing the Communist co-operative. It was Sunday. The spacious hall was thronged with



Palmiro Togliatti

men playing cards or draughts, or watching television. There was a restaurant, serving hot meals at cost, an *espresso* bar, and an annexe containing a fine indoor *bocce* court, the Italian version of the bowling alley.

The lonely village boys crowding the hall knew that, to the Milanese, their dress, their gait, their dialect made them objects of contempt and ridicule. Where were they to go, what to do? Well, here was the Red co-op, where one could linger over a cheap meal and where some "sympathetic" comrade was always willing to listen to one's troubles. Is it surprising that the majority of them became Communists?

Although the party is growing in almost every part of Italy, it is from

the area north of Rome that Communism draws its greatest strength. Here the Communists' position is reinforced by alliance with the socialists, from whose left flank they sprang in 1921. On the city and provincial levels—also in local governments and in trade unions—the socialists often supply the needed percentage points to form a majority, invariably dominated by the more dynamic Communists. Out of Italy's 8,000 townships, some 1,700 are run by this kind of coalition; and almost all of these lie north of Rome.

Communist control in the north is further buttressed by an interlocking structure of vested interests. The party operates hundreds of manufacturing, trading and agricultural co-operatives. I noticed that the main piazzas of many Communist-run towns were paved with the same purple porphyry, and learned that the supplier was a Communist co-operative working a quarry near Verona. Other Red ventures into capitalism include ownership of shops, cinemas, garages, dance halls, hotels, and several big import-export houses doing business with Iron Curtain countries.

I spent a day in Carpi, a prospering town of 45,000 in the lush, green Po plain. The comrades had promised me a "glimpse into the future Italy," and I saw what they meant. Dubbed the "Red Citadel," Carpi was in effect a Soviet republic. The party, mustering 56 per cent of the local vote, was wielding total power, subject only to the controls of the government in Rome.

Carpi had some 250 small and medium-sized manufacturing plants, employing 5,500 workers. The Communists, with town hall, trade unions and co-operatives in hand, were ruling by a system of reward and punishment that was extremely hard to resist. Your local taxes seem too stiff? A friendly officer will reconsider the assessment: Your boy needs a scholarship? We may arrange it. You'd like to set up a small factory? The township has bought land; we'll let you have a building site for one-third the going price. You don't like us? Too bad, your customers may have to do their shopping at the shop across the street.

Even some local capitalists were party members. The owner of a knitwear plant, a man "exploiting" several dozen workers, told me: "I've been a Communist since I first learned to think. Perhaps my business would be socialized under a Communist regime? So what? I'd still be manager and make about what I'm making now, without the headache of responsibility."

The problem of religion—the party's biggest headache in this Catholic country—has been handled with finesse. "We oppose religious narrow-mindedness not with swear words and anti-religious sermons," Togliatti has said, "but with the

idea of tolerance." Surprisingly, it seems to work.

The Catholic Church, it is true, has never compromised with the "materialistic, anti-Christian doctrine of Communism." But the intuitive Pope John saw himself as the supranational shepherd whose mission it was to reunite the separated flock.

With this goal in mind, he started punching holes in the Iron Curtain. He began negotiations with Eastern European governments. He received Khrushchev's son-in-law, Aleksei Adzhubei, at the Vatican. And his encyclical, *Peace on Earth,* with its warning that "One must never confuse error and the person who errs," could be read to suggest something like peaceful co-existence with the Eastern *bloc*. As a result, Catholic vigilance relaxed. Everywhere I went in Italy, people were saying that it was now "all right to be both, Catholic and Communist—the Pope himself said so."

In Italy today it is chic to be Red. This is especially true in intellectual and artistic circles. Some of the best-known members of the Rome film colony are Communists. Renato Guttuso, the painter, is a member of the party's Central Committee. Journalists, publishers, writers, poets, architects and scientists play an active part in Communist life. Carlo Levi, author of the best-seller, *Christ Stopped at Eboli,* carries no party card. Nevertheless he recently accepted an invitation to stand for election on the Communist ticket and is now a senator. "Why not?" he asked me when I called on him. "I still retain my independence."

This blooming love affair between the party and the intellectuals excites millions of young Italians. The Communist youth organization, grouping 188,000 boys and girls between 14 and 21, is one of the party's most dynamic branches. It has penetrated some of the country's leading universities, maintains youth cells in factories and schools, stages cultural debates, even operates a travel bureau. Its message: the Soviet Union is the country of the future—vigorous, youthful, with equal opportunity for all; while the United States is old and stodgy—the land of entrenched privilege where youth has no chance.

And there it is. With its hard core of workers; with its battalions of tenant farmers, shopkeepers, artisans and students; with its light cavalry of intellectuals and artists, the party represents a terrifying striking force. How close is it to taking over?

There is no reason to abandon hope for Italy's still young democracy. For one thing, the period of "moral disarmament" in the face of the Red threat is over. Already, the Communist success in last April's elections has mobilized political and spiritual forces that had been passive or indifferent. As one talks with

the leaders of the middle-of-the-road Italian parties, one finds them far from ready to throw in the towel. Many are at work preparing a constructive programme which would enable the government to roll back the Red tide.

The Vatican, which had for years provided a rallying point for anti-Communist forces, is taking a new interest in the Italian scene. In a recent broadcast, Vatican radio sharply reminded its listeners of their duty, calling on all free men to "block every line of Marxist penetration."

"There is no pretext," the broadcast added, "that could justify any indulgence or conciliatory attitude towards Marxism and Communism." It is no secret that Pope Paul VI has given top priority to the spiritual battle against Communism.

Most political leaders, both of the Catholic centre and the non-Communist left, believe that an anti-Communist campaign, to be effective, should be two-pronged. "The effort to alert the Italian public and to expose Communism as the threat it is," one prominent junior statesman said, "must be accompanied by structural reforms. We must show the Italian people—all of them—that the democratic parties can give them a fair deal. As long as they are not convinced of that, the protest vote on the far left is bound to rise."

One thing is certain—in the event of a Red victory, the Communist "new look" would quickly disappear. It would not be the first time that a country was taken in by such blandishments. In almost every one of the Eastern European countries now in the Soviet *bloc*, Communism made its way to power with the aid of trusting allies. But, once the "Popular Front" had gained control, the Communists turned on their partners and swiftly liquidated them.

This happened in Poland, where the left-wing coalition that won the 1947 elections was smashed from within by the Communists. It happened in Romania, where the "National Democratic Front" was bloodily transformed into a Communist dictatorship. It happened even in Yugoslavia, where the Communists, having conquered with the help of many other groups, immediately grabbed power for themselves.

While Italy's Communists promise the nation "constitutional guarantees" and even a multi-party system, there is no reason to believe that they could keep these promises even if they wanted to. For Communists are Communists, and it is in the nature of the beast that it needs total power to survive. And with that total power go all the dreary trimmings of the merciless police state. Arriving at the goal of their conspiracy, the triumphant comrades would wipe off their smiles—and deal with both partners and opponents according to the well-known formula.

POINTS TO PONDER

A SPEAKER recently told a group of businessmen that he would never promote to top level a man who was not making mistakes—and big ones at that. Obviously, he did not have habitual bunglers in mind. But he did admit that business does not look for the man with no faults. It wants the man who makes creative mistakes.

—C. T. Ryan

GRATITUDE does not consist of loving a person who does us a service and of doing him a service in return. It consists of profiting by the service that has been done, so that we can act as well as possible towards the whole of humankind, and not only towards the individual to whom we are grateful.

—Frederic Paulhan

I NOTICE that the wicked of this world usually hang together even when they hate each other. This is their strength. Good people are scattered, and this is their weakness.

—Yevgeny Yevtushenko,
A Precocious Autobiography (Collins, London)

EVERY person has his own natural stress level at which his mind and body function most efficiently. Any forced deviation from this natural base-line may have ill effects. In other words, it is just as bad to restrain a naturally active, energetic person from going at his own intense pace as it is to drive a passive, bucolic individual to attempt peak accomplishment.

—Dr. Hans Selye

IF I wished to see a mountain or other scenery under the most favourable auspices, I would go to it in foul weather, so as to be there when it cleared up; we are then in the most suitable mood, and nature is most fresh and inspiring. There is no serenity so fair as that which is just established in a tearful eye.

—Henry Thoreau

THERE is something so curiously tickling, so warming to the foolish heart in the phenomenon we call coincidence. When we thus catch life in the very act of rhyming, our inordinate pleasure is a measure, perhaps, of how frightened we really are by the mystery of its uncharted seas.

—Alexander Woollcott

I HAVE always disliked the phrase "fall in love." I object to "fall." It implies that we are walking calmly along when suddenly—a hole, and we fall in! Real love always takes time. You would not expect to plant a seed and find it full-grown overnight. It needs proper soil and nourishment to achieve its full growth and beauty. So does love.

I do not say that "love at first sight" may not later turn into love, just as I do not say the planted seed may not grow to maturity. I do say, though, that it needs time. —Dr. Murray Banks

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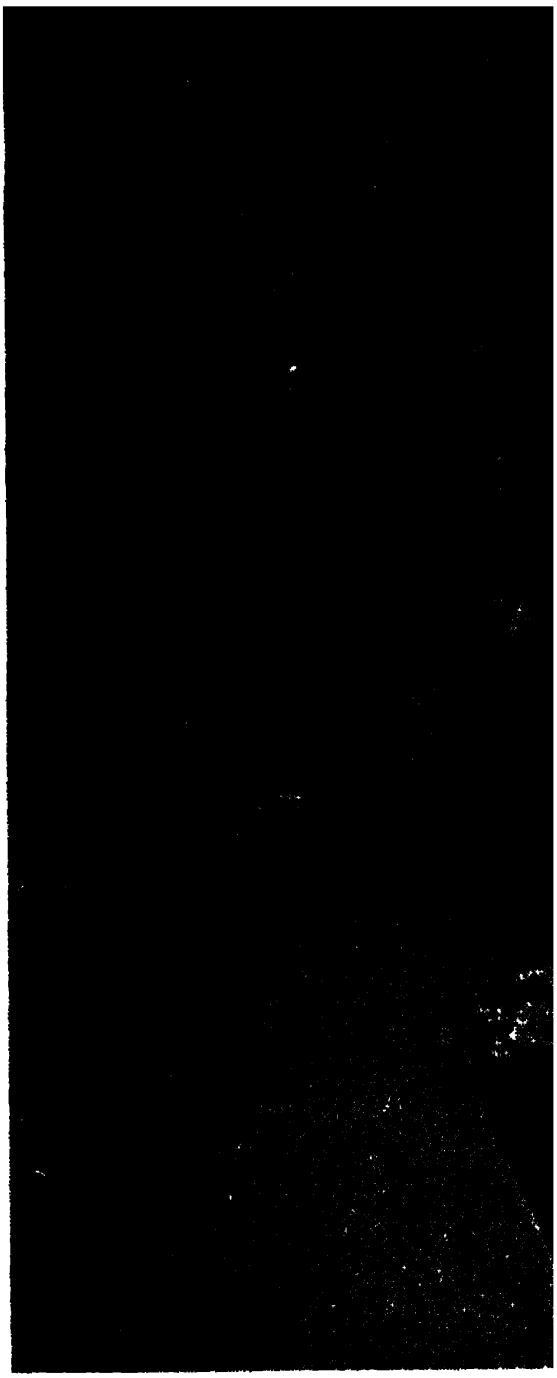
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Meet the grey squirrel—acrobat, camouflage expert, gardener and extrovert



TOMBOY OF THE TREETOPS

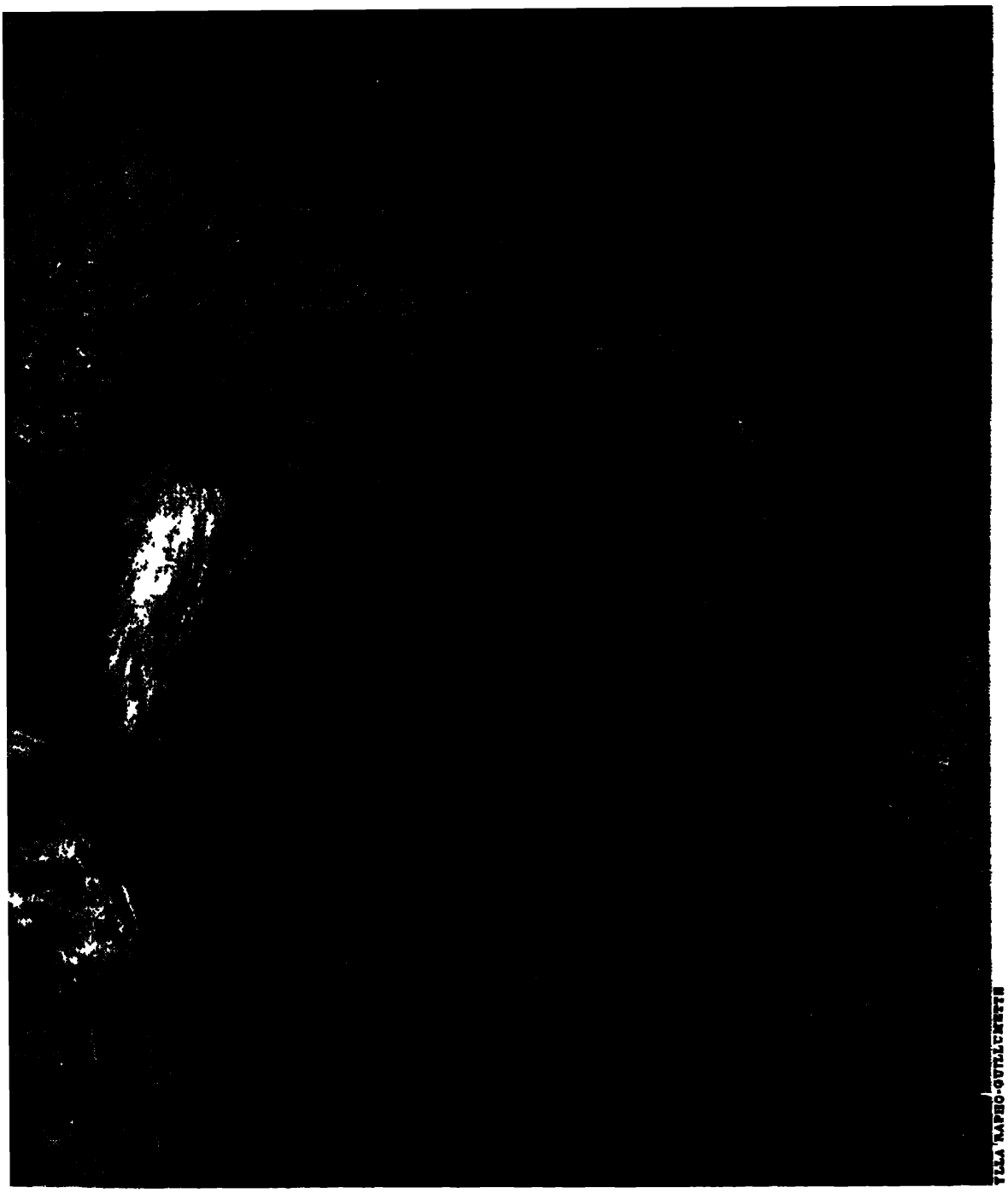
By Jack Denton Scott with John Ennis

The grey squirrel gyrated on the topmost branch of a wind-shaken oak. Sleet had glazed the tree, sheathing it in slippery silver.

Suddenly the little animal slipped and fell, tail unfurling like a parachute as he plummeted down. Although he hit the frozen ground with a thump, he scampered off apparently unharmed.

To him, such a fall is nothing. Naturalists have observed that a squirrel can land as easily as a bird after falling for 100 feet with tail

Adapted from an article in U.S. Lady



straight out and legs spread to make the loose skin between them add to the air-brake effect.

That magnificent eight-and-a-half-inch tail seems to be the grey squirrel's most valuable asset. The ancient Greeks, who had a word for everything, named the squirrel "Shadow Tail." Squirrels sit by the hour grooming this bushy appendage. They use it as a shield when fighting. In cold weather they wrap it about them like a blanket. It is their umbrella in the rain and parasol in the sun. That tail is also the balance factor enabling them to

make 12-foot leaps from tree to tree, and aiding them when they move gracefully across slender branches, much as an umbrella helps the tightrope walker.

With perhaps the widest range and greatest adaptability of any animal, grey squirrels can survive on mountain or plain, in forest or park.

They adjust their diet to the season, eating their favourite acorns when they are available, but otherwise managing with oak-catkins, beech-mast, cob and filbert nuts, walnuts, chestnuts, the seeds from many trees, fruits, berries, fungi, insects, birds' eggs and uprooted bluebell bulbs.

Monica Shorten, Britain's leading expert on squirrels, records that grey squirrels have been found on moorland 1,700 feet up. They have fallen off piers into the sea. They have been reported riding on the backs of lambs, fighting rabbits and hares, chewing the toes off lead statues and causing short-circuits by scaling electricity pylons.

Mass movements of grey squirrels were seen at Swanmore, near Southampton, in 1942 and 1947. Hundreds of them hurried down forest rides hour after hour, intent on some unknown destination, never stopping to rest or eat. Naturalists conclude that such mysterious movements are caused by two factors: lack of food and over-population of the species.

The very existence of grey squirrels in Britain is a feat of adaptability. A native of North America, the grey squirrel made its first recorded appearance in Britain in 1876, when a pair were taken as exotic pets to Henbury Park in Cheshire and later released. Thirty other small groups of American grey squirrels were released—or escaped—in various places up to 1937, when importation was made illegal except under licence.

The restriction came too late; grey squirrels have won an iron grip on Britain's woodlands, delighting most people, infuriating others. Foresters hate them because, for reasons still obscure to naturalists, squirrels strip the bark from sycamore and beech trees to get at the sap; this can kill a tree which may be worth from £30 (Rs. 400) to £100 (Rs. 1,300) or more.

Sir Richard Cotterell, chairman of Britain's 1953 Forestry Commission of Inquiry into squirrel control, pronounced, "Outlaw the little brute. Throw sentiment out of the window. Take a 12-bore gun and shoot at sight." Thousands of farmers followed his advice, urged on by a government bounty of one shilling, soon doubled, for every squirrel tail handed in. As in all wars, propaganda was used; the term "tree rat" was widely but wrongly applied to the grey squirrel, and the disappearing red squirrel—just as much a pest in its day—was held up as a pathetic victim of the grey invader.

More than a million grey squirrels

were killed in five years at a cost to the British taxpayer of £100,000 (Rs. 13 lakhs). When the bounty was withdrawn in 1958 there were as many squirrels as ever: the tough little creature has a way of producing extra litters when a scarcity of squirrels leaves empty woodland crying out to be occupied. Today the official attitude is changing. Says a British Ministry of Agriculture officer who studies squirrels and their control, "It isn't useful to kill a squirrel. The great majority do no damage."



In fact, we now know that many a tree owes its existence to nature's own gardener, the squirrel who carefully buried a nut or acorn and forgot to dig it up. Contrary to general belief, grey squirrels do not store nuts for the long winter in one central hoard, but bury them haphazardly a few inches underground. Naturalist Ernest Thompson Seton estimated that a hard-working grey squirrel will bury five nuts every three and a half minutes and will keep on doing this every morning during the three-month season, burying probably 10,000.

How the squirrel finds the nuts again during the winter has always been an intriguing question. But most naturalists agree that its superior sense of smell is the main factor. Seton observed a grey squirrel dig straight down, without error or a trial shaft, to nuts buried under two feet of snow. Squirrels shell the nuts in an instant with two pairs of long, curving incisors which grow continuously and must be honed by daily use to keep at a normal length.

The grey squirrel's vision is acute, especially his perception of movement. His hearing, too, is thought to be exceptional, enabling him to detect the snapping of a twig at abnormal distances.

In the woods, grey squirrels are adept at camouflage, freezing to a tree trunk or lying along a branch and almost becoming a part of it. One of their cleverest tricks is "sidling"—rotating to the opposite side of a tree from where you are. Young squirrels will play this game as many as 20 times before scampering to the treetop. They also seem to have a sixth sense to warn them of approaching danger. Miss Shorten describes how a squirrel in Berkshire, England, moved her young to another nest only a few hours before the deserted home was blown away in a gale.

Squirrels are protective parents. When disturbed by telephone-line men trimming a near-by tree, a squirrel was seen to come tearing

PHOTOGRAPH: H. A. THORNHILL/AUDUBON SOCIETY

out of her tree nest, three tiny youngsters clinging to her back, their tails and arms wrapped round her neck in the normal infant-carrying position. With babies riding easily, she stopped, glaring and chattering at the intruders. At last after much scolding, she took refuge in a nest a quarter of a mile away. A squirrel mother with a nest of young has been known to drive off a hawk by hissing, chattering, and finally rising up on her hind legs to box at it.

The half-ounce young are born in the spring or summer, three to five in a litter. Blind and naked at birth, they are suckled in the nest for seven weeks before they leave, timidly at first, testing their footing in the treetops. At about ten weeks they are weaned, and by the age of five or six months they are on their own for their six or seven years of playful life; their mother often makes them a gift of the nest home and builds another for herself. These little spherical treetop homes of interwoven leaf and twig are marvels of construction, with cleverly thatched rainproof roofs and twig-camouflaged entrances. They are insulated with moss and bark and fixed into the forks of oak or beech trees.

Some class this alert little creature among the most intelligent of animals. A. D. Middleton, the naturalist, has described how grey squirrels in Yorkshire extract the corn from mechanical pheasant feeders by pressing on the small wooden platform with their forepaws. In city suburbs, a squirrel soon learns the trick of hauling up the string that suspends a half-coconut on a bird table. Despite their natural timidity, individual squirrels can become boldly tame, rattling at the windows of householders who put out food for them and coming for titbits when called by their human friends.

The grey squirrel is the cheeky tomboy of the animal world, spending most of his time—when he isn't food-hunting—dancing along a limb, scooting up a tree, leaping from branch to branch, with the sheer joy of life. People sit for hours feeding squirrels with nuts in response to saucy begging, tempting them to climb on their arms and perch on their shoulders. Squirrel-watching will always be part of the rural scene.

Vive la Difference!

A FRIEND sent over to Paris on a publicity job got into trouble several times because of his ignorance of local customs. One day he remarked ruefully, "I find there is a lot of difference between Paris and where I come from; and you notice it more in Paris than you do at home."

William Gargan's Finest Role

By Carl Wall

In San Francisco's Alcazar Theatre on an autumn night in 1960, William Gargan, playing the role of a cancer-stricken former president of the United States in Gore Vidal's *The Best Man,* intoned his closing lines: "I want you to pick up that phone and ask for Dr. Latham. Tell him to come quick and bring a stretcher because I can't move. I'm afraid the old man is just about dead."

Gargan spoke his lines in a husky, tortured voice. As the curtain came down to shattering applause, no one in the theatre, including the actor himself, was aware that these were the last "stage" lines ever to be spoken by Gargan in a theatrical career stretching over 35 years. He would speak again, but in a far different voice; and his lines would be spoken in a drama more heroic, more demanding than any he had ever enacted.



That night *The Best Man* ended its San Francisco run, and everyone started packing for an opening in Chicago a few days later. At home, Gargan told his wife, Mary, of the sore throat that had been plaguing him for weeks. "Why don't you see the doctor, Bill?" she said.

"Can't take the time," he protested. "Too much to be done before we take off for Chicago."

Next morning, however, the company's road manager phoned to say that the Chicago opening had been postponed. Immediately, Mary made a phone call. "Come on, Bill," she said as she hung up. "You have a date with a throat specialist."

It was the Chicago postponement and Mary's phone call that gave Bill his chance for life. A biopsy showed cancer of the larynx.

After the first shock of almost nauseating fear, Gargan found himself steadying. "What are the odds?" he asked quietly.

The doctor studied the strong lines of Gargan's face, the still carroty-red hair, the deep blue eyes. He knew that this man would want the whole truth.

"The odds are better than even that an operation will be successful. Statistically, if the cancer doesn't recur in five years, you're cured."

"The operation means the end of my career, doesn't it?" Gargan asked.

"I'm afraid so. For conversational purposes, though, there's a speech method which——"

But Gargan was only half listening. "And if you don't operate?" he asked.

"This form of cancer moves terribly fast."

Gargan's reaction was swift. "I'd like you to operate as soon as you can," he said.

The next evening Mary and Bill walked into the room reserved for Bill in a Los Angeles hospital. Long after official visiting hours they sat talking. They talked about the year Bill had won the Drama Critics Award for the outstanding performance of the year in *Animal Kingdom*. There were remembered yarns from films he had made: *They Knew What They Wanted,* for which he was nominated for an Academy Award, *Night Flight, The Bells of St. Mary's, British Agent.*

There were memories of the childhood of their two sons, Bill and Leslie, now busy with jobs in Chicago and Hollywood. Mary and Bill had agreed not to notify them about "the opening," as Bill called it.

And there was the incident only a few months before. While Bill was rehearsing for *The Best Man,* they had taken a flat not far from the Sports Arena, where the Democratic Party was holding a convention to nominate a candidate for the Presidency of the United States. As they sat watching the convention on television, there was a knock at the door and a voice asked, "Mind if I come in and watch your television? The one in our apartment upstairs just broke down." And so it had been in the Gargan living-room that John Kennedy first learned of his nomination for the Presidency.

It was nearly midnight when the

head nurse brought the Gargan's reminiscences to a close. As Mary kissed him good night, Bill murmured, "You're a saint, darling. I love you." Those were the last words she was to hear in the voice she knew so well.

THE WEEK following the operation was probably the most dismal in Bill Gargan's 55 years. A broad-shouldered, husky six-foot-one, he had always kept himself in condition with top-grade tennis and better-than-average golf. To a laughing extrovert with a keen Irish wit, the world of illness and hospitals was strange.

During his career as an actor he had earned over a million dollars. But the cost of living, high taxes and generous hand-outs had diminished his fortune. Where, he wondered did an actor without a voice go from here? One afternoon, while Mary was visiting him, he reached for the pad and pencil with which he communicated and scrawled the words, "Why, Mary? Why?" Tears coursed along the deep furrows in his cheeks. Holding him close she murmured, "You're still alive, my darling, and we must be thankful for that. Don't you see that it's a kind ot miracle? If it hadn't been caught in time . . . Maybe God has saved you for a purpose."

One afternoon, soon after he had left the hospital, Bill had a surprise caller, an attractive young woman. "I'm a volunteer worker for the American Cancer Society," she explained. "A friend of yours asked me to call on you, Mr. Gargan." (The friend was Mary, but she didn't mention that.) Bill's first thought was that this woman had one of the sexiest voices he had ever heard—very low, with a peculiar vibrant quality. He wondered if she was some new actress he should know.

"Your friend thought," she continued, "that you might be interested in speech lessons."

Gargan almost sprang from his chair. Was this some sort of joke? Sensing his anger, the young woman removed the scarf she wore round her neck. In the hollow of her throat was the incision of a laryngectomy — identical to his own!

He scrambled for the pad. "*How* do *you* talk?" he scrawled.

"It's known as oesophageal speech," she explained. Gargan recalled now that the throat specialist had said something about "conversational speech." Before he could write another question, however, the girl took from her bag a small blue pamphlet. Gargan turned to the first page. "To the laryngectomized patient," he read, "the realization that normal speech has been destroyed is always frightening. Much of the sting can be alleviated by the skill of the oesophageal voice instructor."

"Much of the sting . . ." That

was the understatement of the century. His eyes were blinded by tears of sudden hope. On his pad he wrote, "You have a pupil."

Through the ACS, Gargan enrolled in an oesophageal-speech class in Los Angeles. The instructor explained the principles. In the normal person, the sound of the voice is projected by the vocal cords of the larynx. When this "voice box" is removed, the windpipe is severed and grafted to a hole, about an inch in diameter, cut low in the throat just above the breastbone. It is through this hole that the laryngectomee breathes.

The secret in oesophageal speech is to take air into the mouth and swallow or force it into the oesophagus by locking the tongue to the roof of the mouth. When the air is forced back up, it causes the walls of the oesophagus and pharynx to vibrate. This action vibrates the column of air in the passage, causing a low-pitched sound. This sound can be formed into understandable words by the lips, tongue and teeth. "It's really a sort of controlled burping," the instructor explained.

To produce gas in the stomach, beginners usually drink huge quantities of ginger ale. During his first lessons, Bill dutifully swallowed quart after quart, but there was nothing but unintelligible hiccups. For an actor who had once been able to make a stage whisper carry to the most remote balcony seat, it was humiliating.

But at last, after hours of trial, he produced that first all-important "ba." And at the end of the fourth week, he was able to say simple phrases such as, "I will speak," "Good morning" and "Good-bye." Day and night he practised, reciting parts from plays, mumbling the heady poetry of Shakespeare.

At the end of the sixth week, he partly told, partly scribbled to Mary, "I have a difficult line, darling—with an 'h' sound. When you're able to understand it I'll know I'm in."

It was not until the 11th week that Mary was finally able to interpret the phrase. Somewhat baffled, she repeated the words: "Heap big coconuts!"

"Heap big coconuts!" Bill repeated joyfully. It was the first line he had ever spoken on the stage—playing in *Aloma of the South Seas*.

Mary, suddenly remembering, threw her arms round him. "It's a wonderful line, Chief," she cried. "Heap big talk!"

After 16 weeks, Bill was formally graduated from his speech class. By that time he was unusually articulate. Miraculously, his voice actually seemed to have some of the resonant timbre of his stage days. Even more important, his confidence had returned. He began to reactivate his television and film production company.

Then the American Cancer Society approached him, to ask if he

would accept assignments as an unpaid volunteer to help other cancer victims. In gratitude for his own speech lessons, he agreed.

His first assignment was to visit a veteran character actor who, since losing his voice, had become so depressed that he had given up hope. Hopping on a plane, Gargan was at the man's home within hours. His first words were, "Now when the hell did they cut *your* throat?"

It is impossible for a laryngectomee to laugh; but slowly the actor's face creased into a grin and his stomach heaved silently. He gestured helplessly. With that the two men threw their arms round each other, both heaving uproariously. Before the session ended, the actor agreed to attend an oesophageal-speech class in Los Angeles. As Gargan said later, "One lousy wisecrack and he was on his feet again."

On the plane home, Bill found his thoughts moving along unexpected lines. He began adding up the years, the pluses, the minuses, the sad years, the laughing years. "It didn't take me long to realize," he remembers, "that I was hopelessly in debt to God. And now God was giving me these bonus years of life. What was I going to do with them?"

As the plane came down on to the landing strip, his conviction took shape. William Gargan, Unpaid Voluntary Worker—that would be his billing from then on. It might be only a small part, but in the years remaining to him, he would give it everything he had.

In the following months, Gargan worked his personal therapy on scores of cancer patients. He had a very small income, so travelling expenses became a major problem. When the American Cancer Society insisted on paying these expenses, he finally agreed, but still travelled as cheaply as possible. He told them, "Somewhere there may be a small research project only a few hundred dollars away from an important discovery. The dollars I save may make the difference."

Early in 1962 the national headquarters of ACS asked him to come to New York to speak to a group of patients at the U.S. National Hospital for Speech Disorders. There Gargan gave one of the finest performances of his life. He told of his own early difficulties in mastering oesophageal speech, of the gallons of ginger ale consumed in vain. "Finally," he said, "I tried a little Scotch and found that a teaspoon now and then worked wonders with my vocabulary."

For a finale he told the story about the foreign concert violinist who lost his way to New York's Carnegie Hall. Hugging his violin, he approached a bearded beatnik. "Could you tell me, please, how one gets to Carnegie Hall?" he queried. The beatnik regarded him languidly, then finally drawled, "Practise man! Practise!" "And that," Gargan concluded, "is the way it is

with oesophageal speech." The men and women in the audience, all laryngectomees, quivered in silent laughter. For many, it was the first attempt at laughter for months.

In the past two years, Gargan has journeyed more than 350,000 miles across the United States and Canada to talk to groups of fellow laryngectomees, visit cancer patients, speak before service clubs, women's clubs and fund-raising rallies. In that time, ACS officials estimate, he has been heard by at least 250,000 people and additional millions on radio and television. The result has been a shower of contributions for the ACS—and immeasurable help to individual cancer victims.

Gargan is always available. One evening in a New York restaurant a young man approached his table and said that his father, a retired detective, had recently undergone a laryngectomy. "He's read about you in the papers," the youth said, "and he'd get a big kick out of it if you autographed this menu." Bill learned that the father was feeling terribly low because his wife had just died. The next day, scheduled to leave for California, Bill left his hotel three hours earlier than planned and spent the time with the detective in his home.

Last year while in Washington to speak at an ASC fund-raising dinner, Gargan received a phone call from the White House. "The President wants to know if you could come over for a few minutes," the speaker asked. At the White House, President Kennedy rose from behind his desk.

"Learned you were in town when I saw your picture in the paper this morning," he said. "I just wanted to say hallo." He paused, then added, "I wanted to wish you good luck in the great job you're doing."

At that moment, even with the miracle of oesophageal speech, Bill Gargan was unable to utter a word Then his face broke into a smile.

"Thank you, Mr. President," he managed at last, remembering to arch his tongue high for that difficult "th" sound.

Figures of Fun

FILM comedienne Joan Blondell's husband always advised her to subtract five years from her age for publicity purposes. So she subtracted five from the year of her birth, 1914, and that's why her birth date now is listed in a film "Who's Who" as 1909. —W. J.

AUTHOR Frank Scully once had an important lunch date with Louis B. Mayer, then head of M-G-M. "How did it go?" Scully's wife asked when he returned home. "Fifty-fifty," reported Frank. "I showed up and Mayer didn't." —Stewart Harral

THE ART OF RELAXATION

By Wilferd Peterson

Modern man must learn to break the tensions of daily living or the tensions will break him. He must learn to bend with the stresses and strains like a tree in the wind, and spring erect again after the storm has passed.

He first relaxes his mind by thinking thoughts of peace, quietness and tranquillity. He mentally pictures the placid pool amid whispering pines and puts himself in tune with nature's calming mood.

He strives to carry an inner serenity with him so that even amid a whirl of activity he will not lose his poise.

He relaxes his body by imitating a lazy person—a boy on the beach in the sun, a man in a boat fishing. He takes a tip from the circus clown who says that he avoids being injured in his tumbles by making his body become "like an old rag doll."

He exercises—walks, stretches, works in the garden, plays golf—knowing that physical tiredness invites relaxation and sleep.

He knows that confusion is one of the chief causes of tension, so he organizes his work, puts first things first, does one thing at a time, avoids hurry and develops a spaciousness of mind.

He uses the soothing beauty of great music to calm his nerves.

He observes that a smile is a symbol of relaxation, so he learns not to take himself too seriously and to laugh at himself now and then.

He takes time for meditation. He accepts the wise counsel of Emerson who wrote: "Place yourself in the middle of the stream of power and wisdom which animates all whom it floats, and you are without effort impelled to truth, to right and a perfect contentment."

My Business is Selling Dreams

By Russ Morison

What an estate agent has discovered about house-hunters



When you walk into my estate agent's office I know what you want to buy--not a house, but a dream, a way of life. Before I look up from my desk to greet you, I know how you'll describe your dream: a house in a nice neighbourhood, not too far from a school, with four bedrooms, a big living-room, a modern kitchen, at least two baths—at a price well under the market value of such a place.



I could tell you that eventually you'll settle for less, pay more and be overjoyed at your good fortune, but I won't, because you'd go to my competitors. Instead I listen and try to practise the perception which sells houses, because I know that in looking for a house you're seeking happiness, success, security, respect, beauty, comfort--intangibles as individual as the shape of your nose.

During 26 years in the estate

Condensed from The Christian Science Monitor

agent's business, I've learnt that it is the wife who generally buys a house. Since I'm a husband this makes me uncomfortable, but the fact is that a good many house-hunters are women whose husbands don't even know their wives are looking. Herbert thinks his home is his castle, but Marian is spending her afternoons with me looking for a new one. She'll find it.

When a man is transferred to a new district by his company, he will often buy a house before his wife arrives on the scene. Such deals are good for me—they are quick, decisive, logical and masculine.

But 95 per cent of these purchases turn out to be mistakes. The wife won't like the cupboards or the kitchen or the dog next door, and in less than two years I'll pick up another commission selling her the house she wants.

I know that an estate agent sometimes makes you angry when he shows you a 25,000-dollar house after you have firmly declared that your top limit is 17,500 dollars, or when he offers you an old house with a Victorian kitchen and no garage when you have said that you have a modern house in mind. But this is often the only way he can find out what you'll really buy. Experience makes him discount what you say. "I don't want to make a show; I just want a nice little home," could mean that you're in the market for the fanciest showplace in town. "One thing I know is construction; my house has to be basically well-built," may mean that you'll buy a jerry-built heap that's dressed up with fake pine-panelling and imitation brick—if it fits your dream.

You don't intend to mislead me; you mean what you say when you come into my office, for then you're logical, sensible, reasonable. You remain that way until you fall in love with "the house." Then you have as much logic as a bride and groom. Love is blind and if you can afford your dream, you'll probably buy it. And if you can't afford it, you'll probably buy anyway.

When I take you out house-hunting, I'll spend hours talking about taxes, plumbing, heating bills, insulation, resale value, school facilities, but I know you'll forget it all when you see your special house.

Everyone feels something different about a house. A creaky, old-fashioned veranda to one buyer brings back the memory of summer holidays at Grandmother's; a muddy back yard becomes a welcoming patio in another purchaser's eye; a leafy apple tree sprouts an imaginary swing and one hears the laughing children.

Most women spend a lot of time telling us the equipment they want in the kitchen, the need for built-in cupboards and a downstairs lavatory, but many of them buy the outside of a house.

One woman told me recently, "I can see myself in this house." We were still sitting in the car. It had

taken her about 13 seconds to decide. It took her three weeks to get her husband to sign the papers, but that house was sold before we went up the front steps.

It's always hard for someone else to see what you like in a house, and that's the main reason you should house-hunt without friends or family. Parents, especially, should never go along when their married children buy a house. The older generation never fails to compare today's facts with yesterday's memories. The house bought a generation ago has always grown larger with the years while the price has shrunk. If the young people are wise, they sneak out alone and buy their own home.

If you want to buy shrewdly, you should arm yourself against your weaknesses when you look at houses. If you fall in love with a large expanse of lawn, remember to look critically inside the house; if you are entranced by the large rooms, be sure to study the garden carefully. Once the estate agent realizes you have a weakness he may try to exploit it. If you want to buy a roaring fireplace, he'll show you roaring fireplaces by the dozen and you could end up paying more money for less house.

When you put your own house on the market, it pays to paint the back steps, mend dripping taps, nail down that loose floorboard, but you can't expect to get a return on all your major improvements.

It's a good idea for you to be out when the buyer comes through. And please take your animals and children with you. I once had a prospective buyer who was allergic to cats and I lost my sale because the seller's cat rubbed up against her. Some time ago a householder's four-year-old daughter informed my clients, "That's where the roof leaked," "It's always cold up on this floor."

If you are present and passionately show off the good points of the house the buyer's reaction usually is, "What's wrong with it? There must be something; she's too anxious to sell."

The chances are that after you sell your house and go out to buy another, you won't understand why prices are so high. They're high because a man's dream house is always beyond his means; his fine forgettery for the faults of the home he has sold isn't so complete that he doesn't want something far better the next time. The marvellous thing is that so often his means seem able to stretch to accommodate his dreams. My customers tell me their absolutely top price and then fall in love with the house which costs 4,000 dollars more—and they buy it.

It is their dream come true and they'll live happily ever after, or until they have a new dream and start looking for a new house. That's what makes the estate agent's business so puzzling, perplexing—and profitable.

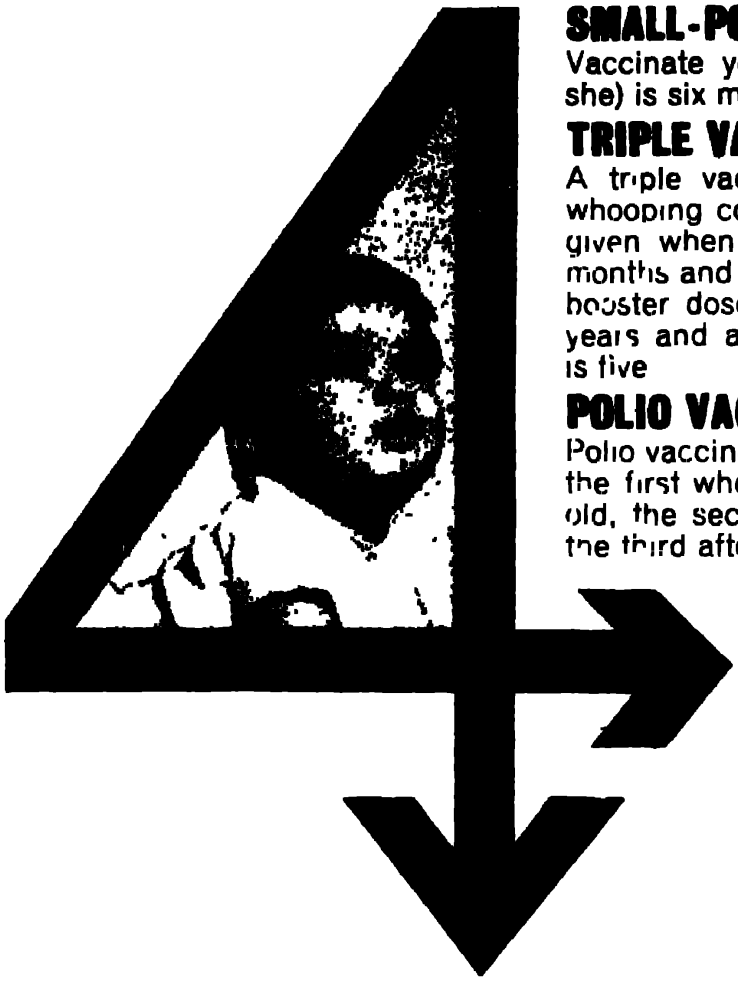


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Personal Glimpses

TOSCANINI's rehearsals were fiercely concentrated and intense. "Every rehearsal is like a concert to me," he said, "and every concert like a début." He often sang with the orchestra in a strangely cracked voice, low and hoarse. He sometimes forgot about this habit.

Once, in Salzburg, during a tense dress rehearsal, his voice howled out above the instruments. He halted the orchestra in amazement. "For the love of God," he cried, "who is singing here?"

—Howard Taubman, *Music on My Beat*

JEAN COCTEAU, in his uniform of the French Academy, complete with sword and three-cornered hat, attended an official banquet. Near him sat an American general who gazed astonished at the unfamiliar uniform. Finally, with military terseness he asked, "Panzer troops?

In just as military a fashion Cocteau snapped, "No. Genius."

—*Allgemeine Zeitung*, Hanover

LIKE MANY other scholarly men, Michael Ramsey, Archbishop of Canterbury, has long been noted for his absent-mindedness. The landlady of a house where he once dwelt as a young curate recalls hearing a knock at the door one day as she was straightening up his room. Assuming it was someone seeking her lodger, she called out, "Mr. Ramsey's not here He's gone out."

"Oh, yes. Yes, of course," came the reply. "Thank you very much."

The landlady realized the voice was Ramsey's. She reached the door just as he was turning away.

—James Simpson *The Hundredth Archbishop of Canterbury*

PRESS CONFERENCES in Washington can often be longwinded and pointless, but those held by Sam Rayburn, as Speaker of the House of Representatives, were short and to the point. When he had assembled reporters for what turned out to be his last news conference, he said, "You know how things were yesterday?"

"Yes, Mr. Speaker," we chorused.

"Well," said Sam, "they're the same today." —George Dixon

H. G. WELLS was showing a friend his beautiful new home in London. On the third floor he opened the door to a small room and said, "Here is my bedroom."

"Why don't you use those handsome bedrooms downstairs?" the friend asked.

"They belong to my housemaid and my cook," Wells replied. "They've been with me 20 years."

"But in most homes the servants have the small rooms," the friend persisted.

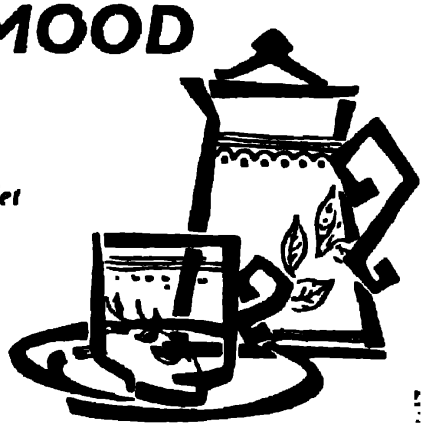
"That's why mine haven't," Wells answered. "My mother was a maid in a London house." —Elisabeth Cobb



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I Love a Nice Liar



What every woman wants . . .
deserves . . . needs *. . . is a great, big,*
rose-coloured fib now and then

By Hildegarde Dolson

In a theatre foyer recently, I spotted an attractive man I hadn't seen for ten years. "David!" I cried. He stared at me so blankly I felt crushed; but when I muttered my name, he exclaimed warmly, "Hildegarde! I would never have recognized you—you look so much *younger!*" As he left us, and I was looking after him with the eyes of an intoxicated doe, my escort said, "He certainly got out of that one nicely."

He certainly did. And I would now follow that charming liar to the ends of the earth.

Perhaps I'm particularly susceptible to a good cover-up job because,

Condensed from McCall's

in my youth, I had a daily dose of candour from a schoolfriend named Maribelle. You know how they sometimes say of somebody, "She's so honest it hurts"? That was Maribelle. I still bear the scars.

I remember the afternoon my mother had taken a group of us swimming. When I appeared in my bathing suit, Maribelle surveyed me thoughtfully with unblinking blue eyes. "Goodness, you're bony!" she said in a voice as clear as rock crystal. "Your chest looks like the slats in a Venetian blind."

I think we like most being fibbed to about our weakest points—and this gives my flatterers an awfully wide range. For instance, when I go to a party and try to launch small talk, it displaces its own weight and we sink with all hands aboard. So I'm yearning to meet a fellow guest who will say, "You're the wittiest girl I've met since Madame de Stael."

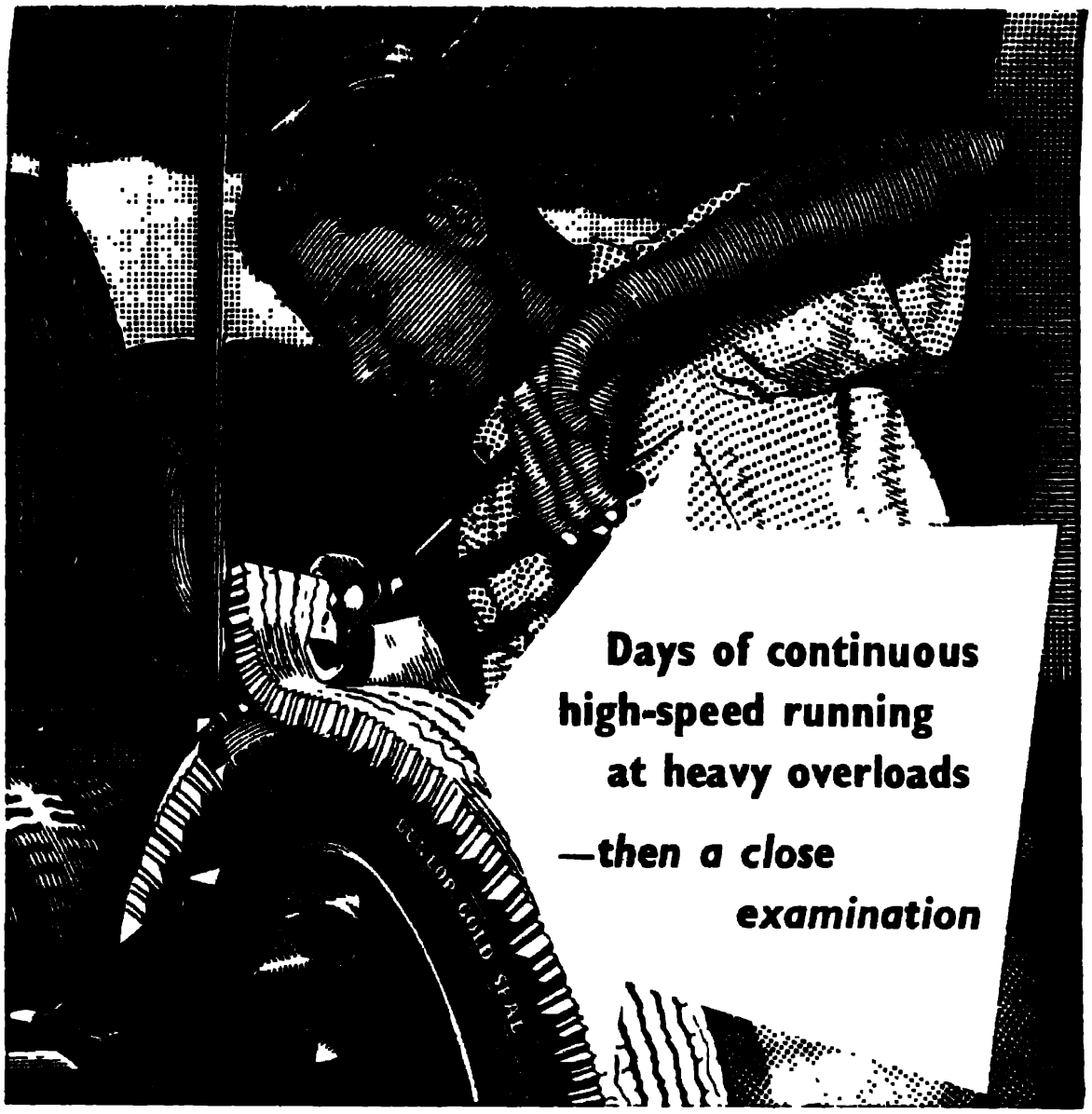
In fact, if ever I can afford a gigolo, his duties will consist mostly of coming out every hour on the hour, like a cuckoo clock, saying, "You're so witty." For an encore, he might add, "You lovely, long-limbed creature, you—and so witty, to boot."

When I give presents, chosen and wrapped with tremulous care, I want to be told: "You have a genius for picking the right things!" All too often the loved one examines the object and asks, "What's it supposed to be?" When I explain proudly it's a combination paperweight and one-cup cider press, he remarks, "The things manufacturers think of for mugs to buy." What he should say, instead, is: "Who but you would ever have had the patience to track down such a delightful novelty?"

The clothes I choose for myself are another vulnerable point. If I wear something I already know is a disaster, I want to be told reassuringly, "That dress *does* something for you." Never mind what it does, I'm not the petty sort who analyses a compliment for hidden meanings. All I want is a big fat white lie to hold on to.

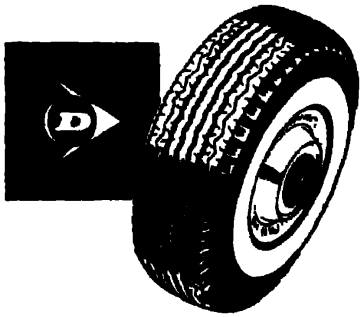
Last spring, in a moment of madness, I bought a hat made of piled-high yellow blossoms, rising to a peak just short of Mount Everest. Reflected in the mirror, artfully lit and with the musical accompaniment of a salesgirl's, "Most women couldn't wear that, but you carry it off with an air," I swallowed it whole. But when I put on the hat at home and said scornfully, "Mirror, mirror, on the wall, who's the fairest of them all?" the mirror could not lie.

My date, bless him, was made from a finer mould. True, at first sight he did let out an involuntary grunt, but he recovered instantly. "Do you like it?" I asked anxiously. "It's—it's really unusual," he said, perspiring manfully. "I've never seen you look so—uh—flowery." He lied like a gentleman, and I



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accepted it like a lady—lock, stock and barrel.

The tireder I am, the more I want to be told I'm looking divine, radiant, wonderful. And the older I get, the more I appreciate a friend of mine who was born in Vienna and still retains the Continental graces. As surely as dew falls or birds sing, he can be counted on to say, in greeting, "You're looking marvellous."

Only once have I known him to falter. This was when he came to visit me in hospital, where I had landed with a nasty sinus infection. As he entered the sickroom he was already saying suavely, "How good to see you You're looking——" but at that moment he caught sight of me, as I raised my bulbous red snout and squinted hopefully through swollen eyes, waiting for honey. For a second or two, he was speechless. Then he said with great tenderness, "Your face looks fuller. It's marvellously becoming."

Every hospital should keep a liar like that on the staff, for therapeutic reasons.

My doctor is entirely too blunt. When I go to see him, complaining of sharp twinges, and bravely suggest I must have some exotic ailment, he snorts: "It's rheumatism. What did you expect at your age? You'll probably have it the rest of your life." How easy it would be for him to say instead: "With your remarkable resilience, you can be cured in a week. How I wish all my patients had your cheery Spartan courage." For that, he could have my heart's blood.

They say flattery is only skin-deep, but that's deep enough for me. Truth is what I feel in my bones, like rheumatism.

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—Contributed by Llewellyn Hall

SMALL children living in a new housing estate in Bergen, Norway, were having difficulty in finding their way home because all the houses looked alike. At a meeting of the parents it was decided to attach photographs of the mothers to the front doors.

—*Contenze*, Germany

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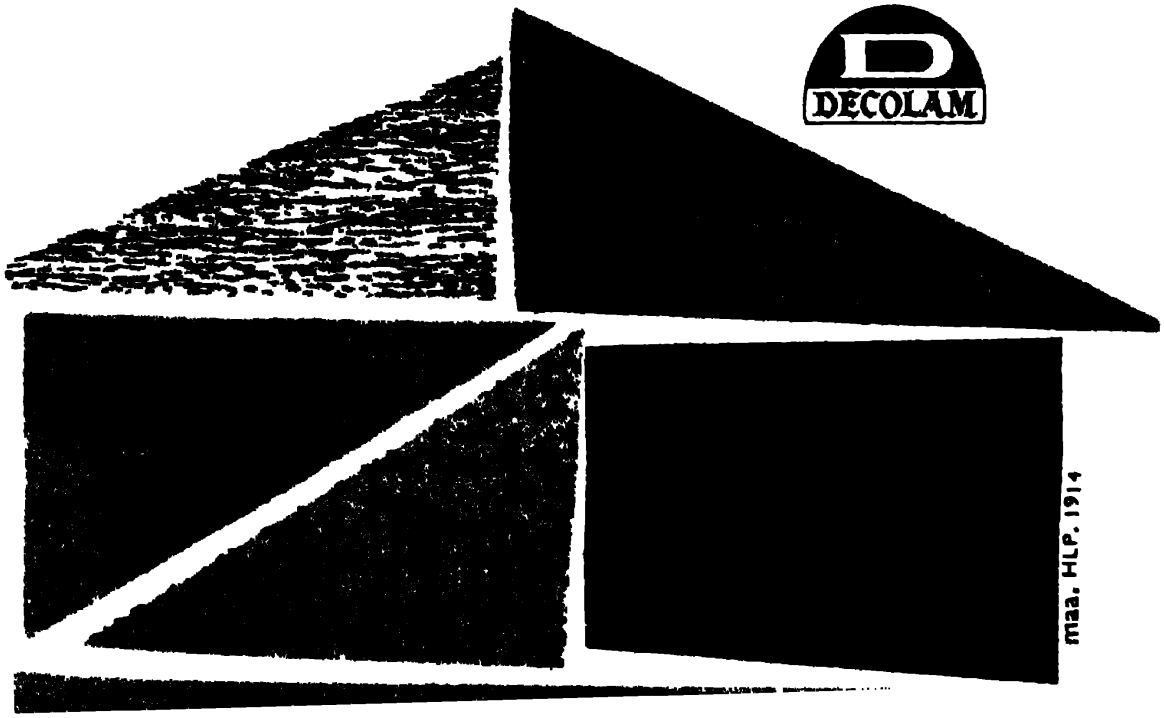
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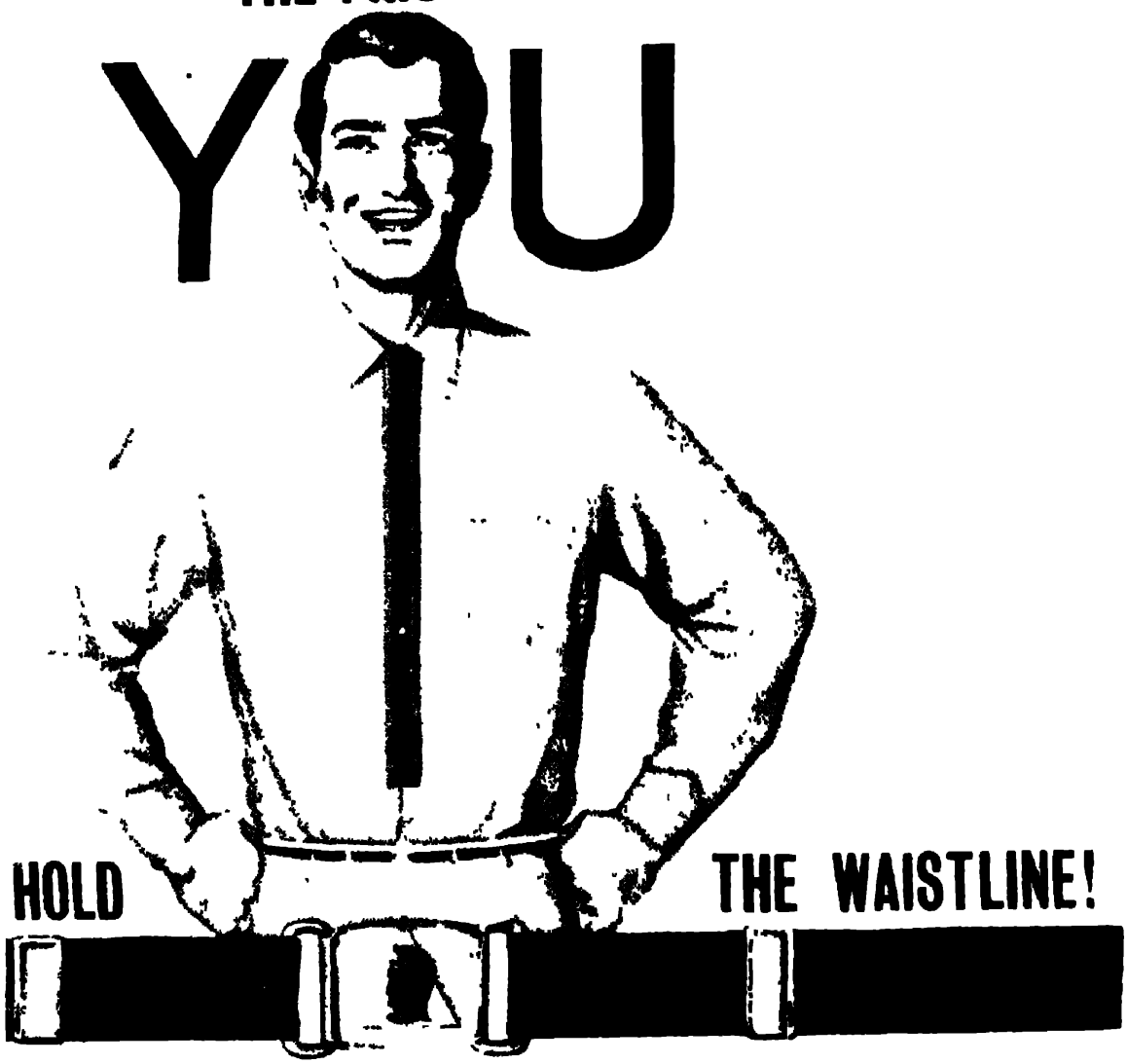
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All Quiet at Little Rock

Once a byword for racial intolerance, Little Rock has made a remarkable moral recovery. This community achievement is a hopeful portent for other strife-torn cities

By Joe Alex Morris

One of the most hopeful chapters in the struggle against racial segregation in the United States can be summed up in two photographs of teenage girls. The first picture, taken in 1957, made headlines that damaged U.S. prestige all over the world. It shows 15-year-old Elizabeth Eckford gazing hopelessly at a platoon of Arkansas National Guardsmen barring her from entering high school in the city of Little Rock.

The second picture, taken in 1963, created no more than a mild ripple of interest anywhere. It shows another 15-year-old girl, Jacquelyne Faye Evans, an A student, who had just been elected to the high-school National Honour Society in the same city of Little Rock.

The significance of the two pictures, of course, is that both Elizabeth Eckford and Jacquelyne Evans are Negroes.

The contrasting experiences of two teenagers may seem unimportant in a city of 135,000. But the photographs illuminate a great change in the community itself—a change that may also occur in the next few years in other strife-torn cities like Birmingham, Alabama; or Jackson, Mississippi.

In 1957, bitter racial prejudice inflamed by ambitious politicians plunged a leaderless Little Rock into fear and mob violence and threatened economic disaster for the community. By 1963, parks, golf courses, cinemas, buses, baseball park, hospital, library, the largest shop lunch counters and rest-rooms, the big hotels, the local medical society and the schools were wholly or partly integrated. Some "white" churches have opened their doors to Negroes. Visiting African officials have been welcomed—and often entertained—without discrimination in "notorious" Little Rock.

Significantly, the city is blooming

again economically. Building construction doubled from 21 million dollars in 1961 to 43 million in 1962. Department-store sales jumped eight per cent in the first half of 1963. Seven new factories are being built or are scheduled for construction this year in the city's handsome industrial park.

Yet not everything is perfect in Little Rock. Segregationists and deep-seated racial prejudice do not



Little Rock, 1957. A soldier protects two Negroes threatened by white students

suddenly vanish. A majority of citizens give ground reluctantly and only when pushed. Yet Little Rock *has* made a remarkable moral and economic comeback that may provide a blueprint for other cities facing integration crises.

To understand how the comeback was achieved, look back to 1957. Then a growing, prosperous city, Little Rock had a plan for gradual school integration that the citizens accepted by voting two-to-one for school-board members favouring it. But southern segregationist organizations decided to make Little Rock a testing ground. With the help of the Arkansas legislature, they stirred up mob demonstrations that prompted President Eisenhower to send the 101st Airborne Division to protect nine Negro students entering Central High School. The next year, Governor Orval Faubus ordered all four city high schools to be closed indefinitely to prevent integration. Dazed and frightened, citizens of Little Rock found that their city had become a symbol of intolerance and prejudice in the eyes of the whole world.

The result was economic paralysis. For almost four years not a single large factory was built. The number of new families moving into Little Rock dropped from about 2,000 a year to fewer than 1,400. The sale and rental of homes dwindled by 20 per cent.

Merchants and professional men who urged moderation were boycotted by segregationists. Over a five-year period the Pulitzer Prize-winning Arkansas *Gazette* lost an estimated 2·5 million dollars and 15 per cent of its circulation. "The fear of boycott paralysed every effort at constructive leadership," a prominent businessman said later. "It was as if we lived in a police state."

It was the women who made the first constructive move, in the unhappy autumn of 1958. Mrs. D. D. Terry, a distinguished fighter for

human rights, telephoned several friends, who telephoned still others. They all met at the Terry home to form the Women's Emergency Committee, its objective the reopening of the high schools. "We organized women all over the city into a kind of telephone chain so that we could reach thousands of people in a few hours," Mrs. John Samuel, executive secretary, explained recently. "We mailed out leaflets. We got other organizations to work. We grew to around 2,000 volunteers of all economical levels."

There were rough moments. Anonymous telephone calls conveyed dire warnings to the women. One caller threatened to burn the Terry home. State police appeared at a board member's house and demanded the committee membership rolls, suggesting that otherwise they would make a few arrests. The woman bluntly refused, and the police went away.

Progress was slow and often painful. In November 1958, the committee helped to elect three moderates to the school board, but three avowed segregationists were also elected. Then in the spring of 1959 the committee got a break. The segregationists on the school board, with the backing of Faubus, refused to re-engage about 40 principals and teachers they regarded as "soft" on the integration issue. The purge brought cries of outrage and provoked businessmen into action that resulted in the recall (removal from office) of the three segregationist members.

That victory was the turning point for Little Rock. From then on, businessmen took a far more active hand in the struggle. Informal and unpublicized committees raised money and united leading citizens behind a moderate programme. Most important action of all, perhaps, was by the elected but unpaid City Board of Directors,

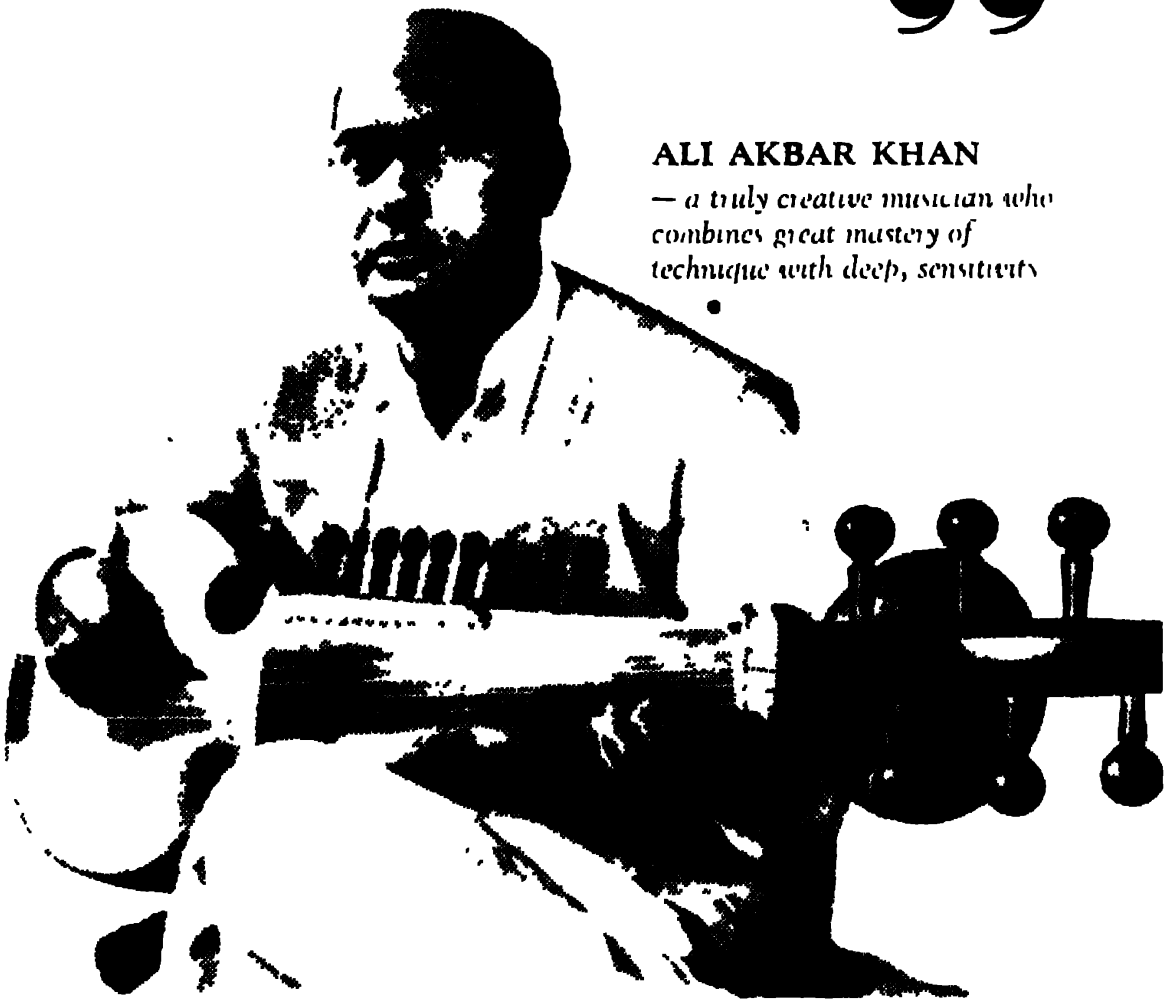


Little Rock, 1963. Negro and white spectators enjoy a baseball game side by side

which among other things reorganized and improved the police force.

When the high schools reopened in August 1959, several hundred segregationists marched on Central High School. The police quickly dispersed them. A month later, school-board offices were dynamited. Police quickly exposed the plot, hatched by a member of the segregationist Capital Citizen's Council, and arrested four dynamiters who were convicted. That

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practically finished the Citizen's Council.

Reopening the schools, however, was only the first essential step in the comeback of Little Rock. Civic improvement was next. About 40 business leaders got together to promote modernization and plan for the future. As a result, some 500 million dollars of public money and private funds has been or soon will be spent on slum clearance, redevelopment and housing projects. A new 50-million-dollar highway complex has speeded up traffic in and out of the business district. The dredging of the Arkansas River for navigation is expected to bring river ships and a big economic boost to Little Rock by 1968.

All such developments began to restore confidence and bolster business. But the basic problem of integration still had to be faced. So, in 1961, a group of Negro professional men and businessmen, cooperating with the bi-racial Council on Human Rights, decided to seek desegregation of parks and recreation centres. They were fobbed off by city officials, but when they went to court to force action the municipal government purposely failed to respond. A federal district court judge then ordered the facilities (except for swimming pools) to be desegregated. It was done peacefully.

Progress was made in desegregation of lunch counters in town, when students at Little Rock's Philander Smith College got busy. They studied the city's "power structure" and began trying to establish a line of communication to the most influential businessmen in the community. At the same time, they held mass meetings on the college campus and in November 1962, as the Christmas shopping rush approached, organized a sit-in campaign at a big store lunch counter.

Promptly, by prearrangement, seven prominent businessmen met to plan for action. Still fearful of segregationist boycotts, they formed an anonymous negotiating committee, which engineered an agreement to desegregate the four large store lunch counters and two hotels on January 2, 1963. At that time a programme would be drawn up for desegregation of theatres and other facilities.

That January, a carefully controlled programme was started with two Negroes eating at each lunch counter for several days. No incidents occurred. So quiet and smooth was the desegregation that it was several days before the Capital Citizen's Council leaders learned of it and sent pickets with anti-Negro signs to the stores. They were ignored. Hotel dining-rooms were also desegregated. The negotiators then moved on to the next objectives—cinemas, restaurants and motels.

The most important goal—and perhaps the most difficult—is better job opportunities for Negroes. Some businessmen have taken preliminary

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steps to put Negroes in jobs as clerks and office workers, and the influence of the "anonymous" committee is so great that it is unlikely this vitally important economic gain will be delayed. Most significant of all, the line of communication between the city's power structure and the young Negro leaders has remained open, and both sides intend to keep it open to solve future problems.

Although at this moment there are hardly more than 100 Negroes in the formerly all-white high schools, and in elementary schools desegregation has only now begun, the school board, prodded by its liberal members, speeded up integration in the 1962–63 term. And to students, school integration is "old hat." J. W. Matthews, Central High School principal who went through the 1957 crisis, reports that both Negro and white students are gaining respect for one another. "If there are disputes we settle them as teenage disputes without racial overtones," adds assistant principal Elizabeth Huckaby.

The general attitude of Little Rock towards integration, while still one of great reluctance, also appears to be changing. The city had always resisted integrated sports. But last year the Arkansas Travellers baseball team acquired a Negro player. At the opening game, a Citizen's Council member picketed in front of the main gate of the baseball park. But when the gates opened, a capacity crowd dashed in so frantically that the picket had to flee to avoid being trampled. A few games later, when the Negro player helped his team to victory, he got a standing ovation.

Leaders of the National Association for the Advancement of Coloured People point out that, except among a minority of liberal-minded white citizens, there is no real desire for racial equality in Little Rock. A more encouraging view is expressed by Worth Long, member of the Student Non-Violent Co-ordinating Committee, who says, "We feel things will be O.K. if we can reach our goals in a reasonable time. So far, this has been only a surface revolution. We still have to face the hardcore problems of job opportunities and housing ghettos. But the businessmen have negotiated in good faith and the future looks hopeful."

The best guarantee of peaceful progress probably lies in the theme repeated time and again to this correspondent: "We are again a growing, prosperous community with a great future. We're not going to jeopardize it by risking trouble over integration. We don't want another 1957!"

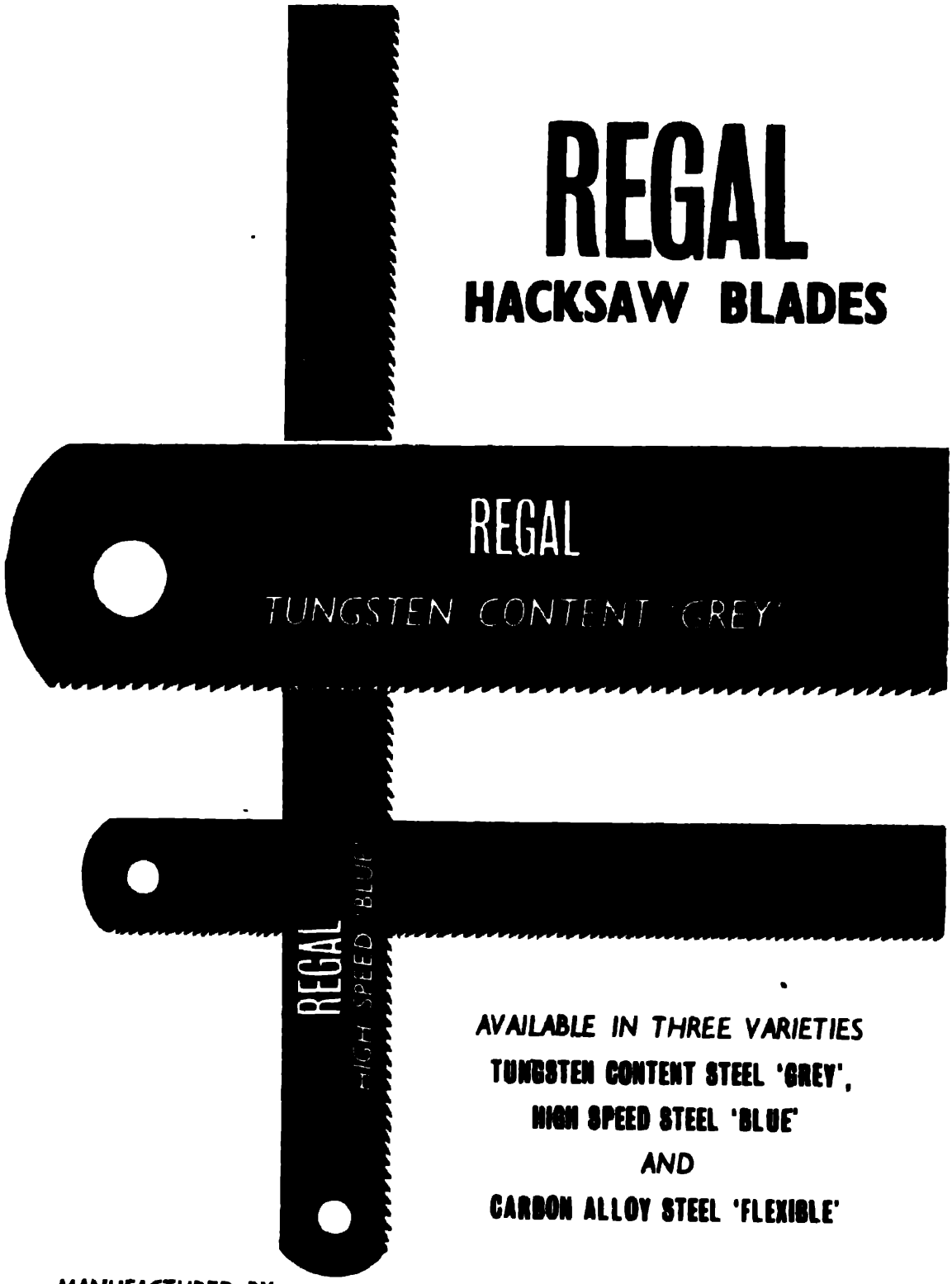
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—Bernhardt

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The Erhard Era Begins in Adenauer's Germany

TIME, change, and the march of events have brought to a finish the 14-year rule of the doughty, imperious old man who guided West Germany up from the ruin of total defeat, up from the slime of the greatest moral and spiritual collapse in recorded history, to a point where Germans could once again walk by daylight, however shameful their memories of the night may be.

Last October Adenauer handed the reins over to his former Economics Minister, Ludwig Erhard. When the history of the post war years is written, how will the tall, spare, 87-year-old man be recognized? How well did he do, and will Erhard carry on in his direction?

Condensed from Newsweek

The Germany of which Adenauer took command one September day in 1949 was a shambles. The Germany he left was the most powerful economic and military power in Western Europe. Winston Churchill called Adenauer "the greatest German statesman since Bismarck." A list of German achievements under Adenauer confirms his judgement.

Under Adenauer's tutelage the scars of war have healed to the point where the victors, except for Russia and her satellites, are now Germany's allies. The ancient enmity with France ended, and a Franco-German treaty of friendship has been ratified by the parliaments of both countries. Germany is a member of NATO (one German general has served as commander of NATO land forces in Central Europe, and he has been followed by another German general). A new German army, 400,000 strong, faces east to the threat of Soviet attack, flanked by troops from Britain, America and France.

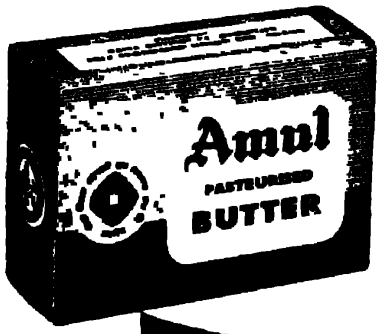
Within two years after he took office, the seamed, crab-apple countenance of *der Alte* (the old man) had become the best-known face in Germany. Sometimes he flitted from town to town at the head of high-speed motor-car processions, exhorting here, admonishing there. An austere man, whose sole indulgence is a love of fine Rhine wines (which he sips after his usual frugal dinner of chicken or fish), he preached the virtues of moderation and hard work. A devout Roman Catholic and staunch anti-Communist, he won the respect of the Allies and the hatred of the Russians.

Above all else, however, he gave the Germans the confidence and the will to arise phoenix-like from the rubble of defeat. He felt that Germans must be told what to do, not asked. Parliamentary process seemed to make the Germans uneasy in the early days, and to some extent it still sits uncomfortably today. Adenauer's personal style became his government's, a method of ruling that has been called *Kanzlerdemokratie* (Chancellor democracy). Nevertheless, it worked.

The bewildered German people, reduced to a primitive barter economy, were caught up by Adenauer's positive leadership. In the first task, economic reconstruction, Adenauer allowed Erhard, a vigorous, pragmatic, then little-known Bavarian, to set the pace by making a bonfire of Allied economic controls. The result has become known as the *Wirtschaftswunder*, or economic miracle.

The pace of Germany's commerce startled other Europeans. In little more than a decade, the Federal Republic—with generous foreign aid—has been transformed from the pensioner, and pariah, of Europe into the world's third largest trading nation and third largest industrial power. Since 1950, when Germany lived on loans and her annual trade deficit was Rs. 475 crores, exports

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have increased sixfold—providing an average Rs. 713 crores yearly surplus—a remarkable contrast to pre-Adenauer days when the Germans, young and old alike, painfully cleared rubble in their shattered towns, chipping mortar off bricks so that they could be used again.

The successes of the Adenauer era, however, were not achieved without cost. Adenauer's rule was authoritarian, frequently contemptuous of democratic processes. Instead of confiding in his elected ministers, Adenauer often leaned on an oligarchy of Rhineland businessmen like the Deutsche Bank's Hermann Abs, the late Robert Pferdmenges of Cologne, and Karl Blessing of the Federal Bank. Sometimes Bundestag deputies were mere ciphers, and because Adenauer was obsessed with foreign policy, internal affairs were left largely to underlings. As a result, Germany's political democratic growth has been stunted; though, considering the history of the German people, it sometimes seems as vigorous as that in President de Gaulle's France. One great omission was the failure to continue effectively the purge of old Nazis in the police and the judiciary. Even Adenauer's State Secretary and closest confidant, Hans Globke, although no Nazi party member, was associated with Nazi racial laws. Stubbornly, Adenauer refused to dismiss him (though he did give up his post on reaching retirement age), and was equally reluctant to move against other dubious officials except when pressed.

Adenauer's critics also charge that by condoning the activities of irredentist East German refugee groups, even to the extent of appearing at their rallies, Adenauer kept alive suspicions that the Germans still hanker after their pre-1939 borders.

Even Adenauer's French treaty has come under attack. During the critical weeks after de Gaulle vetoed British membership of the Common Market, Adenauer alone might have tempered de Gaulle's attitude. Many Germans believe that he failed Europe, and the Atlantic alliance, by merely sitting transfixed. "When he returned from Paris," said one German editor, "he spoke a new language, sounding even in German just like de Gaulle."

A searching criticism of the entire Adenauer era has been offered by Dr. Gerd Bucerius, Hamburg publisher and former CDU deputy: "Adenauer's great fault was that he understood how to sway the masses, but not how to educate them to become citizens. Because he is so much more cunning than those around him, he delighted in overpowering them, instead of convincing them democratically. His party should have forced him to resign earlier."

In any event, old age and a fading power to attract voters at the polling booth finally forced the issue. The Government had also been rocked by such scandals as the affair of the

news-magazine *Der Spiegel*, which forced the resignation of Defence Minister Franz-Josef Strauss.

Recent elections in Berlin, Hesse, Lower Saxony and the Rhineland-Palatinate have gone disastrously for the Christian Democrats, and there is fear in the CDU that the Socialists, led by West Berlin's Mayor Willy Brandt, may scrape into power in the 1965 elections.* It was this fear that spurred the party to demand that Adenauer set a date for his retirement.

Erhard, the new Chancellor, needs little introduction. His rubicund features, six-inch cigars, and air of portly well-being are symbols of the economic miracle. A university professor and a director of a small market-research institute, Erhard was made Economics Minister of his native Bavaria by the U.S. Military Government in 1945 (which led him to say jokingly, "I am an American invention"). Four years later he became chairman of the embryo of a national economics ministry. His theory was that since Germany's only unlimited resource after 1945 was labour, all restrictions should be abolished. A new currency would provide the impetus, and everyone would enjoy the fruits of what he earned. When he presented his plan, General Lucius Clay, U.S. Military Governor, said, in effect: "It cannot possibly work, but go ahead anyway. Things can't get any worse."

The fruits of the Erhard Plan were abundant. Millions of workers rolled up their sleeves to produce for the vast new market. Bewildered housewives discovered that they could buy as much as they could afford—and this years before the victorious Allies could end rationing.

Soon the economic indicators soared. Steel production, 14·8 million tons in 1936 and 23 million tons in 1956, was 32·6 million tons in 1962. The average weekly wage was 150 Deutschemarks (Rs. 175) in 1963. Nearly a third of the insufficient working force holds down two —or even three—jobs to pay for the ubiquitous washing machines, television sets, cars and holidays abroad.

Today, the picture of unalloyed prosperity is altering slightly. Established domestic and international markets are approaching saturation point, while rising costs are undercutting Germany's former competitive advantages. Quality is declining because of poor workmanship—one of the consequences of the lack of manpower. Besides, Germany is taking on the burdens of foreign aid (Rs. 300 crores in 1962) and her own defence (Rs. 2,350 crores in 1963). None the less, a continuing solid 3·5 per cent annual increase in the gross national product looks likely.

Erhard himself offered this analysis: "In those years of the terrific

* At the elections for the Land stag of the federal state of Bremen, held last September, the Socialists preserved their absolute majority, but the CDU climbed from 14·8 to 28·9 per cent of the vote and gained 15 seats. Apart from local factors this success was attributed to the advent of Erhard.

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economic boom, we could reckon on supplementing the working population by something like one million people per annum—either as a result of the high birth-rate years or because of refugees. West German industry and commerce are now feeling the effects of the years when the birth rate was abnormally low, while the Berlin Wall has closed the flow of immigrants from the east."

One of Erhard's proposed solutions is uninhibited exports. He passionately wants Britain and its Commonwealth markets in the European economic community. "It is our task," he said recently, "to turn the Franco-German treaty into an instrument of European unity and Atlantic co-operation."

The Christian Democrats wanted Erhard as chancellor because of his undeniable popularity. Also, perhaps, because they knew his government will be different in style from the stern authoritarian rule of Adenauer. "It is high time," Erhard said recently, "that confidence in the state, in the democratic order, in the rule of law, and in the credibility of German politicians be restored among the German people."

In Western chancelleries, there is little fear that Erhard will radically alter the course of German policy. He is wedded to the Atlantic alliance, a fervent believer in European unity, and a man of broad, democratic views. "Adenauer," observed one diplomat in Bonn, "has cleared the ruins. The old man's successors must now complete the plans, lay the foundations, and really begin building a new Germany."

What Kind of Man is Erhard?

THE new German Chancellor's dislike of the cut-and-thrust of politics has led some people, including Adenauer, to dismiss him as a *Gummilowe* (Rubber Lion) His friends reply that this estimate errs in mistakenly branding as faintheartedness Erhard's innate lack of meanness As former French Economics Minister Jacques Rueff put it, "By a rare coincidence of qualities normally in conflict, he is a man of reflection as well as a man of action Anyone who has heard his stirring speeches will understand that he knows what he is after and is set on getting it in full" Even Adenauer, for all his reluctance to turn over political leadership to the younger man, has said of Erhard: "We have worked shoulder to shoulder and mastered many a difficult situation, have shared troubles and worries. Now and then we have held different opinions, but that's part of the job. There is usually not much substance in people who always agree with each other."

On the personal side, Erhard is fond of good food, which has helped earn him the nickname *der Dicke* (Fatty) from his co-workers He is often found in the kitchen of his home, garbed in an apron, putting together a favourite dish He is an ardent soccer fan and an accomplished pianist He likes to read an occasional mystery (Agatha Christie is his favourite), or listen to recordings of Beethoven, Schubert Mozart, Chopin and Strauss. In the last ten years he has written three books *Wohlstand für Alle* has been translated into several languages; it was published in English as *Prosperity Through Competition* (Thames & Hudson, London).

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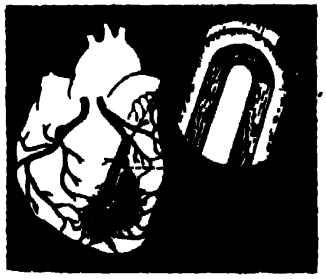
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Humour in Uniform

My COMPANIONS and I were directors of a Special Services club, and had everything spick-and-span for an inspection headed by a general. But at the last moment Ann spotted a forgotten duster lying on a table. Glancing anxiously around and finding nowhere to hide the duster, she hastily thrust it into the front of her uniform just as the general's party entered the club.

The inspection went off without incident. An hour later we were still chuckling about the duster when the general's A.D.C. returned to the club and solemnly handed Ann a "commendation" signed by the general: "For best possible use of available storage space." —GENE MACMILLAN

A NEWSPAPER correspondent and some associates had been assigned to report on a launching at Cape Canaveral. After a few delays in the countdown, the moment for blast-off arrived. The rocket rose a few feet, then blew up in a great burst of flame. After witnessing this spectacle, the correspondents awaited the official press release. When the statement came, it called the launching a "partial success." The correspondent asked the press officer how this dud could be deemed a "partial success." Unshaken, the officer smiled and said, "The destruct button worked perfectly."

—VICTOR MILLER

WHEN MY cousin was called up during the war, he was sure he wouldn't pass the eye test, as he was very short-sighted. After he told the doctor he couldn't read the chart, he was asked to take a step forward. Again he could not read it. This went on until he was about two feet from the chart.

"You'll do," said the doctor, "for the hand-to-hand fighting." —J. K.

DRIVING along I picked up a hitchhiking sailor. He was only about 17; so when he told me he was on his way to see his dad, I asked how his father felt about his joining the navy. "He's very pleased," he replied. "In fact, he talked me into joining."

"Is your father an ex-navy man?" I asked.

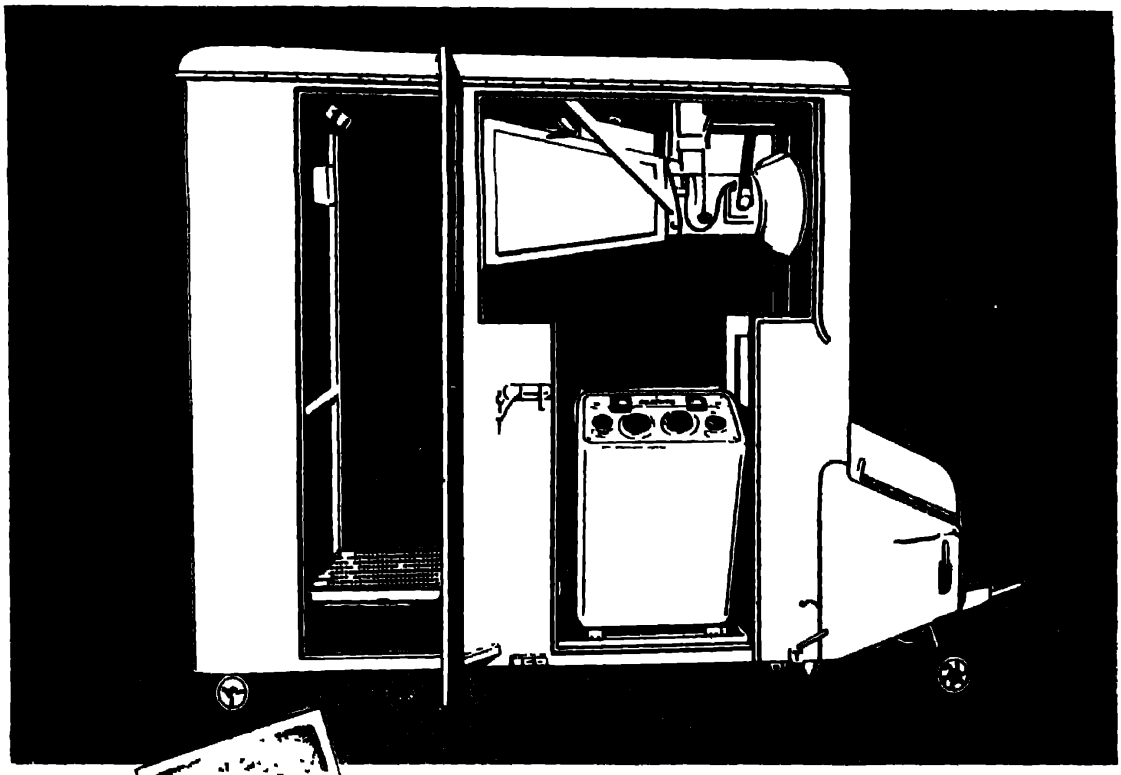
"No, he's still *in* the navy," replied the young sailor. "He's the local recruiting officer at home." —G. B

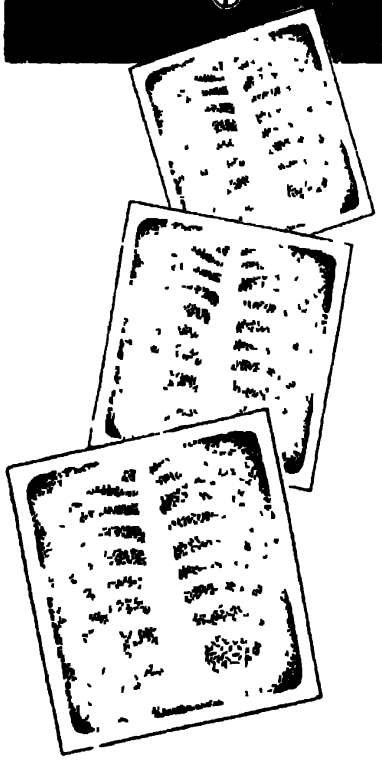
THE PRIVILEGES of rank were never better demonstrated than when I went to a recruiting station to take an Army Reserve medical. Dressed in civilian clothes, I presented my papers to an orderly at the reception desk. "Leave all your clothes in one of those cubicles by the wall and then report back here," he said automatically. Then, glancing at my papers, he called me back. "Are you an officer?" he asked.

"Yes," I replied.

O.K.," he said. "You can leave your pants on!" —CAPTAIN JOSEPH MURPHY

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How We Remember, Why We Forget

Scientists have untangled many of the riddles of human memory and are on the brink of exciting new discoveries

By John Pfeiffer

We move through a world of ceaseless activity, a world humming with events. Experience stirs up things inside our heads, barrages of brief electrical impulses flash along nerve fibres running from sense organs to brain. Images, sounds, odours, all the things we note in the outside world, are represented by coded patterns of impulses—living "sparks," each lasting only a few thousandths of a second.

These are transient signals. Yet somehow certain selected patterns of information are fixed—frozen in flight, as it were—and transformed into permanent records among intricate nerve-cell networks. They are filed away systematically and with amazing compactness for future reference.

In man's memory, nature has created a truly remarkable storage system, one that puts microfilm to shame. This system contains enormous numbers of "memory traces," individual bits of information which represent the past as definitely as cuneiform markings on clay tablets. Recently, scientists have learnt some things about memory and memory traces. And while a great deal of research remains to be done, they feel that they are at last beginning to close in on crucial questions.

They now suspect that learning produces actual changes in the brain —probably a number of different kinds of changes. For one thing, the cortex or "outer bark" of the brain is probably affected. This thin sheet of grey matter contains about 10,000 million nerve cells and represents the brain's most highly evolved

Condensed from Think

centre. Recent animal experiments at the University of California indicate that certain so-called Golgi cells in the cortex, like the root systems of growing plants, may develop more and more fibres as learning proceeds.

The cortex includes special areas reserved as receiving stations for information from the sense organs. Signals from the eye pass to visual areas at the back of the cortex, signals from the ears go to auditory areas at the sides, and so on. Recent studies indicate that among artists the visual areas contain an extra-high proportion of highly-branched Golgi cells; among musicians the auditory areas show particularly dense concentrations.

Further evidence on the possible role of the cortex in memory comes from the classical experiments made by Dr. Wilder Penfield at the Montreal Neurological Institute. About 15 years ago, during an operation on the brain of a 26-year-old woman afflicted with epilepsy, something remarkable happened: Dr. Penfield artificially evoked a memory. When he touched a spot on the side of the patient's cortex with a stimulating electrode, she said, "I hear music!" When the electrode was removed, the music stopped, abruptly. Fifteen minutes later the contact was placed on the same spot, with the same result: "I hear music again. It is like radio."

The surgeon repeated the test 20 times, stimulating spots within an area about the size of a match head. Each time the patient heard the same tune, "Marching Along Together," in vivid detail as if the reel of a tape recorder were unwinding in her mind. And apparently the reel automatically rewound itself: whenever the electrode was removed from the spot, then replaced a few minutes later, the music started all over again from the beginning!

The "unwinding" process is familiar in everyday experience. In trying to recall a line of a poem or popular song, you sometimes have to go through the verses from the beginning until you come to the line you want. A good deal of what we remember seems to be filed away in some sort of time sequence, like the frames in a strip of microfilm. When resurrected the film runs forward, never backward, and at time's own unchanged pace.

The mechanisms of memory are not confined to the cortex. Brain-wave studies show that the electrical activity of the subcortical "limbic" structures—centres located round the inner borders between the cerebral hemispheres—changes during learning.

Damage to certain of these deeper parts of the brain is believed to account for symptoms like those experienced by a middle-aged postman at an ex-servicemen's hospital. He remembers events from his childhood, his war service, details of his postal rounds—all the

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memories he had stored before the onset of his illness several years ago. Since then he has added nothing to his inner records. Because of damage to one of its deeper parts, his brain is incapable of forming new permanent memory traces. He can recall events that came up within the last three minutes; on anything earlier he draws a blank.

There is a distinct difference between (1) not being able to form new memory traces, and (2) not being able to get at traces which have already been formed. Strictly speaking, the postman did not *forget* anything: his brain since his illness has simply failed to register what happens.

Forgetting, on the other hand, involves the blocking of pathways leading to stored information. Often in these cases the memory traces themselves seem to remain intact. Under hypnosis, for example, people instantly recall details of childhood events which they have "forgotten"—that is, which are there but normally inaccessible.

The formation and storage of memory traces are infinitely complex phenomena; the mechanism of recall or retrieval is even more mysterious. Try to imagine what takes place in your brain when someone asks you a question like, "Have you read *The Improbable Marquis?*" or "Do you know Ronald James?" You will respond within a few seconds and probably correctly. Yet to perform this feat you have somehow searched through memory files containing records of thousands of titles and names. Scientists cannot begin to explain this phenomenon.

There are other faculties involving memory that we should like to know more about. Imagination, for example. It may be a kind of mosaic-building process, the "pieces" being already-formed memory traces which are assembled into new patterns—similes and metaphors, scientific theories, utopias. The possibilities of such investigation are endless. In fact, says a leading investigator, "The more we learn about how living nerve cells retain records, the better we shall understand the essential processes of life itself."

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Basic Principle

ON MY first job, in a motor-car repair shop, I struggled futilely to remove a smashed bumper and finally gave up. The body man listened to my excuses, then said, "I had a tough job in the first place I worked, and I told the boss, 'I just can't do it.' You know what he told me? 'Young fella,' he said, 'we only allow two can'ts in this place. If you can't do it, you can't stay!' "

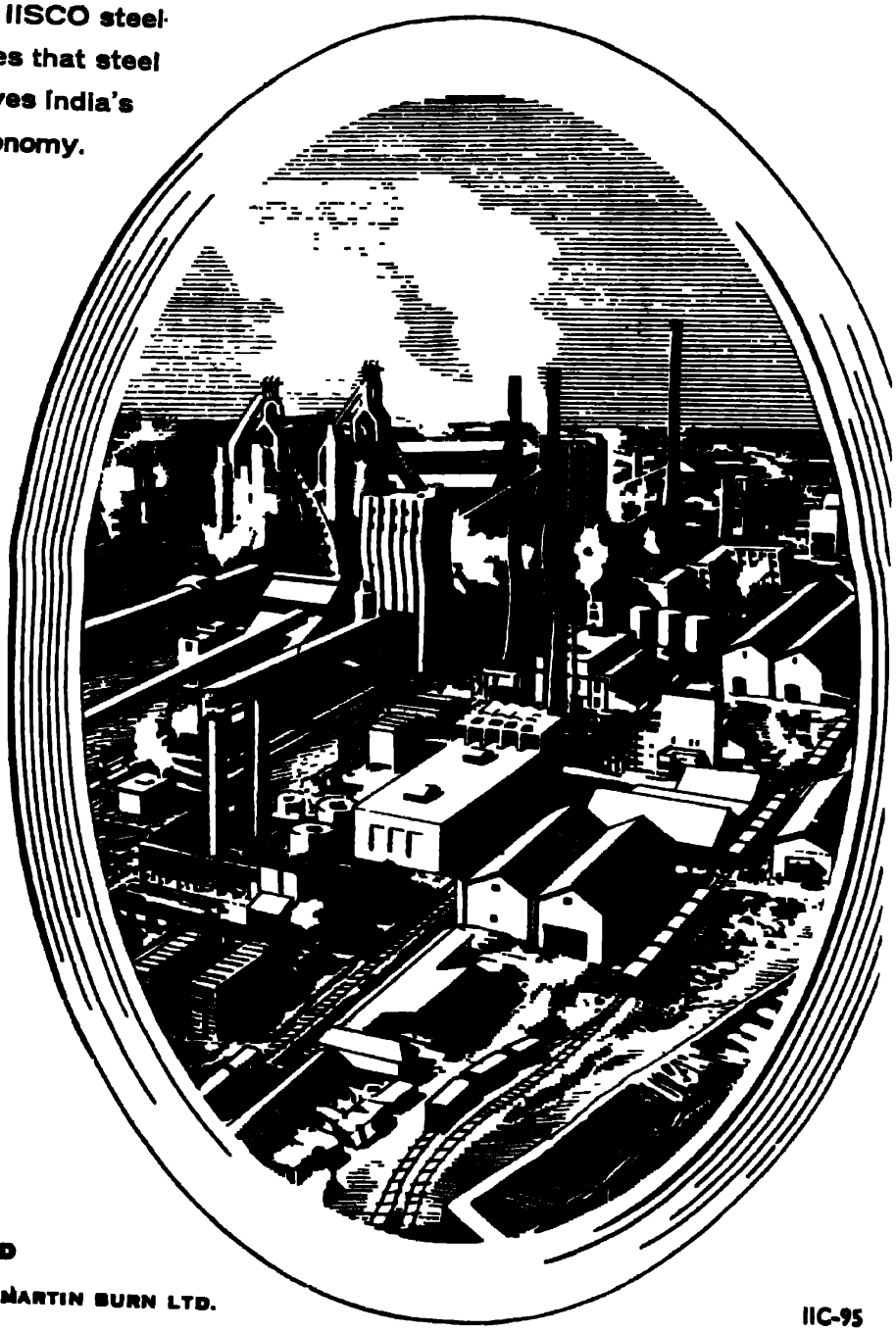
The bumper came off. —D. P. R.

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People-to-People:

A Plan for Friendship

By Dwight D. Eisenhower

What can the ordinary person do to advance the cause of peace? A former President of the United States presents a course of action which he regards as one of the true hopes for mankind

An emotion that lies deep in the hearts of people everywhere is the yearning for peace. No matter how aggressive and despotic their own governments may be, the peoples of this earth recoil at the thought of war. They want nothing so much as a normal world in which to live and rear their children.

Why, I am asked again and again, when the desire for friendship and goodwill among men is so universal, must there be so much misunderstanding and strife? And is there nothing the average citizen can do about all this?

There is, of course, no single, simple answer to the first question. The second question, however, I *can* answer hopefully and emphatically. There is indeed something that all of us can do—something which could prove to be a really effective step in bringing about a true peace.

All of us—men, women and children—can join in a movement which I like to think of as an "epidemic of friendship" among the peoples of the world. It is a movement which in time could seep in under the structures of governments and, through sheer force of popular opinion, create an international climate in which a genuine neighbourliness of nations would thrive.

The movement is called People-to-People, and it is dedicated to the

task of promoting friendship and understanding among ordinary citizens everywhere. It stands apart from government. It is not a propaganda agency. It already has a notable record of accomplishment, and it should be expanded a hundredfold.

Here are some examples of the thousands of local projects and incidents which make up this worldwide programme. To me these little stories are exciting and meaningful—because they provide clear proof that, given a chance, people will make friends across, round, over and under all the natural and man-made barriers separating them.

• An organization in Denmark called "Meet the Danes" sees to it that foreign visitors who wish to get acquainted are invited to some Danish home for an evening. So that there will be a common ground, the travellers and their hosts are usually matched by interests and hobbies or by occupation—lawyers with lawyers, merchants with merchants, teachers with teachers. The office in Copenhagen even found a Danish butterfly collector for a delighted lady with the same hobby.

More than 50,000 foreign visitors have been thus entertained in Denmark, and the idea has now spread throughout Scandinavia. There are similar organizations called "Sweden at Home," "Know the Norwegians," and "Find the Finns."

• A couple of years ago, 2,000 volunteers in Chicago collected more than 300,000 books and shipped them to the schools and libraries in Asian and African communities which desperately want reading material. P-t-P book drives have been conducted in many cities.

• One of many heartening letters I have received in recent years came from a young Dutchman who had worked in Oregon for nine months as an exchange industrial trainee. He said: "The friendship and hospitality of the American people surprised me. I wish more Europeans could be trainees in America and more Americans could be trainees in Europe." The exchange of workers and trainees in many fields is one of the projects of numerous cities participating in People-to-People.

Among the best-established of the programmes, with an excellent record of achievement for more than seven years, is the sister-city movement. More than 250 towns and cities in 52 countries are affiliated with an equal number in America. Communities of all sizes participate. Tokyo and New York are paired; Milan and Chicago; Bangkok and Washington. In India, Madras is paired with New Haven, Connecticut; and Mercara with Darien, Connecticut.

The projects carried on under this programme are endless. Groups of visitors, who have studied intensively for their trips, travel back and forth and are usually entertained in



great expectations!

'What the Dickens!' said Charley's Aunt. 'You never know what to expect these days! You choose a sari, and you can never get a choli to match. Or, if you're lucky to get both, you go out and there—everybody's wearing the same combination!' 'Why don't you try Handloom House,' we suggested. 'There's a festival of fabrics in infinite variety...you'll realise your great expectations!'

handloom house

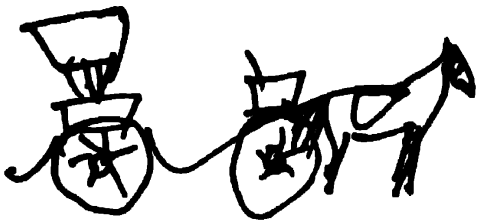
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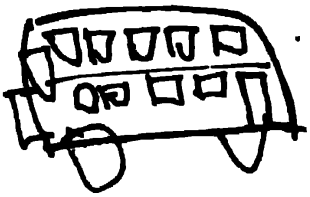
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the homes of the sister city. There is a constant two-way flow of letters, books, magazines, photographs, hobby and art exhibitions, tape recordings, sermons, taped radio programmes, significant small gifts —and sometimes larger gifts when there is some acute need in the sister city.

Schools get into the act with all sorts of exchanges and study groups. Officials delve into one another's problems and often exchange advice and help.

•Kobe, Japan, and Seattle, which are affiliated, are cities of beautiful gardens. Enthusiasts in both cities study each other's methods and often exchange roses, azaleas, rhododendrons, chrysanthemums and other plants.

• Hundreds of thousands of people of all ages are now corresponding regularly with foreign friends whom they have never seen —found for them by the various P-t-P programmes. Often they have some common ground of interest such as similar occupations or hobbies. Usually these correspondents study one another's countries intensively.

The above examples, selected at random, all have a basic common denominator: a breaching of the age-old barriers of geography, language, race, history and customs. As the dark breeds fear in children, so ignorance breeds suspicion in the people of this world. But now, in the middle of the twentieth century, communications have been speeded up and the flow of knowledge has grown from a trickle to a wide, steady stream.

Berlin is now ten hours from Chicago. People come and go effortlessly across the oceans. A particularly dramatic example of things to come is Telstar, the communications satellite. During recent months I have participated twice in Telstar programmes—because I wanted to help demonstrate what close neighbours we have all become.

People-to-People is capitalizing on this widening horizon and creating out of it mutual understanding and solid friendship. This far-sighted programme was started in 1956 as a citizens' movement, and I did what I could unofficially from the White House to help it get going.

There was no central organization, however, and the programme as a whole moved along uncertainly for five years. Then a group of determined men, unwilling to let the programme founder, got together and reconstituted the People-to-People movement.

In November 1961, People-to People was set up as a permanent, non-profit organization, with a distinguished board of trustees. I agreed to serve as chairman of the board on the condition that the entire effort would remain strictly separate from government. I was emphatic on this point, because I

know that all too often governmental statements, pledges and publications at the international level are suspected, at times rightly, of being nothing but propaganda. If P-t-P is to do the job we all want it to do, it must continue to be a citizens' programme.

Today People-to-People has many facets, and most of the programmes are growing rapidly. The university programme, for example, extends the hand of friendship in a dozen ways to many of the 65,000 foreign students now studying in the United States.

Last year, for one thing, it found summer jobs for some 350 of them—thus easing their financial load and enabling them to see another side of life in America. It is difficult for a foreign student, who usually knows nothing of American employment procedures, to get a job without such assistance.

The director of the school and classroom programme expects to have more than 45,000 classrooms with an estimated enrolment of 1·2 million pupils participating in personal contacts with foreign students by the end of the 1963–4 school year.

These P-t-P projects have a particular appeal for children. Teachers all over the United States have told us with what enthusiasm their pupils dig up facts about foreign peoples, how they love to write letters and send and receive small gifts. Incidentally, I have had this same experience with my grandchildren and other youngsters: they seem genuinely fascinated when I talk with them about the future and their own relationship with people everywhere.

Community chapters of P-t-P are now being organized across the United States. One of their most successful projects is playing host, often in the chapter members' own homes, to some of the 852,000 foreign visitors who come to American shores each year.

What a fine thing it would be if People-to-People eventually became big enough to open the doors of an American home for a day or so to every traveller from abroad!

I have been particularly intrigued by the affiliation of York, a lively town of 60,000 in the Pennsylvania Dutch country, with historic Arles, in the south of France. York and Arles regularly exchange language teachers, and several thousand elementary-school children in York study French every year. Exchanges of visitors, students, trainees, and all sorts of information and expressions of goodwill go on constantly. A York newspaper publishes a French cartoon strip regularly. A few years ago an exchange teacher from York married the mayor of Arles, a widower.

In the summer of 1962, more than 100 citizens of Arles and vicinity visited York for several days. They came to see me in Gettysburg, and

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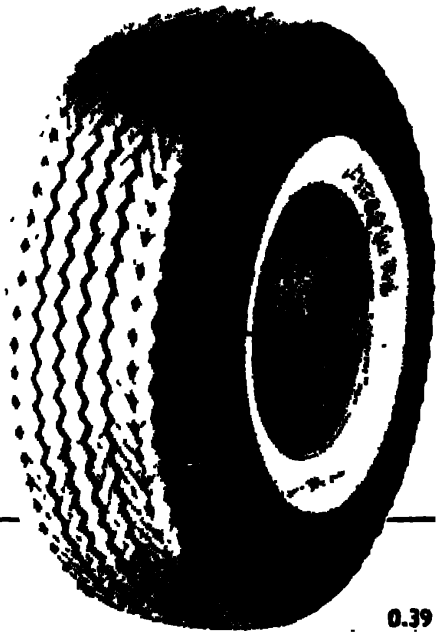
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I was delighted with the enthusiasm of these people. Last year some 80 York people, on a group European tour, spent five days visiting friends in Arles. In York the moving spirit behind this love affair between the two towns is a retired Jewish rabbi, Moses Friedman.

Sports, of course, are a universal language, and Colonel Eagan and his P-t-P Sports Committee have done a great deal to cement friendships the world over. Men's and girls' hockey teams regularly go on tour of foreign countries. Basketball teams, boxers and tennis players exchange visits. The Sports Committee also sends kits of sports equipment to impoverished youngsters in many countries of Africa, Latin America, the Far East and elsewhere. And when foreign athletes visit the United States, Colonel Eagan sees to it that they are warmly entertained.

Another expression of goodwill which always stirs an old soldier's pride is the endless list of friendly acts performed by American military men and their wives overseas. In their spare time, many thousands of these young men and women organize sports among local youngsters, teach informal classes in English and other subjects, help build schools and shops and other

Eisenhower greets citizens of Arles, France, as they visit their sister town of York, Pennsylvania



public facilities. Through benefits, and often out of their own pockets, they raise funds to help local people in need. And when disaster strikes they are always among the first to assist.

Some of these things they do under People-to-People auspices, others simply in the People-to-People spirit.

One limitation, of course, is that as yet we have not been able to penetrate the Iron Curtain to any appreciable extent. Yet I am convinced that the day will come when we can and will reach these peoples, for the citizens of Communist countries want peace and friendship just as much as we do.

In the meantime, we all have a big job to do among the free nations of this earth. Tensions and misunderstandings develop even among friends—as for example between the United States and such staunch old allies as Canada, France and Britain. Yet everyone knows that the bonds of understanding and friendship among free countries must be kept strong and true if our Western way of life is to survive. People-to-People can and does help; with you assisting, it could do even better.

There is plenty for everyone to do in this movement, which, after all, is based on the principles of Christianity. For those who wish to participate but don't quite know how to begin, I suggest that the first step is to write a letter to People-to-People, 2401 Grand Avenue, Kansas City 8, Missouri, U.S.A. This is the least exclusive club in the world. Anyone can join.

Despite the ominous problems confronting the Western world, I am not pessimistic about the future. Indeed, I am sufficiently old-fashioned to believe that in the end right must triumph. Yet it is also true that no worthy goal is ever reached without work. If men of goodwill do not work voluntarily, and hard, for a firm structure of friendship throughout the world, there is a grave chance that one day all of us may be working at whatever we are told to do.

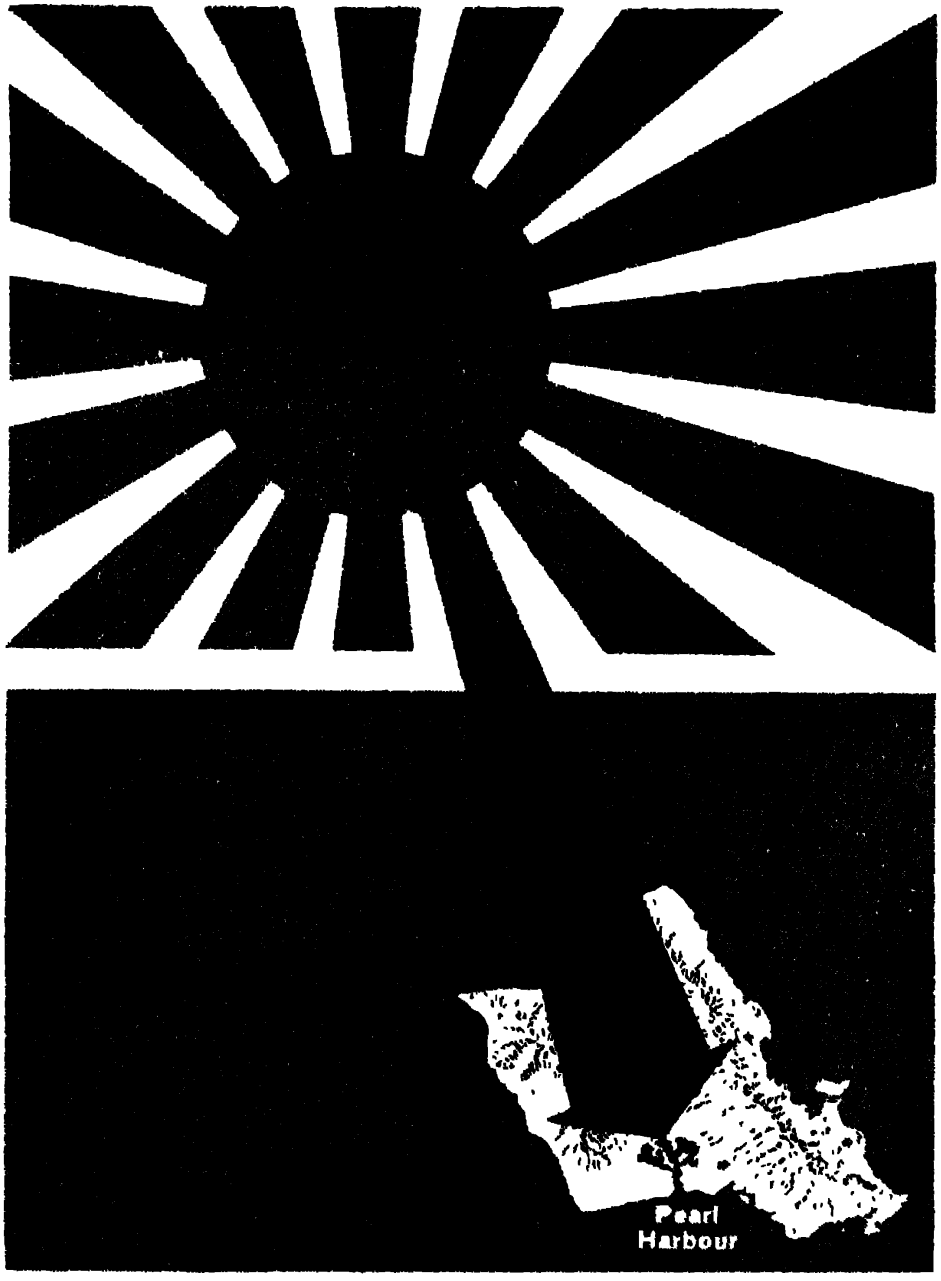
People-to-People may be an infant, but it is lusty, growing and industrious. If millions join the movement every year, one day it may become the Hercules to clean out the filthy stables of war.

Hot Line

I'M extra careful about dialling numbers since the time I phoned for a taxi and asked for one to be sent round immediately. A slightly breathless female voice answered, "This is not a taxi. It is a naked, dripping-wet wrong number!" —L. E. R.

TORA! -for Treachery

The full, untold story of the Japanese attack on Pearl Harbour



from the forthcoming book
by Gordon Prange

Until its publication in The Reader's Digest, the full account of how Japan planned and executed the 1941 attack on Pearl Harbour, the "impregnable" base of the U.S. Pacific Fleet, has been among the untold dramas of the war. Now, after more than 16 years of research, Gordon Prange has produced the authentic record of the action that caused America to join the Allies. How did the Japanese succeed in moving an armada of 31 warships across 3,500 miles of ocean completely undetected? How were 350 warplanes able to attack and cripple the American fleet with such devastating accuracy and stunning surprise? The answers to these and other unexplained questions are given in this compelling story of triumph in treachery.

First of two instalments



 Condensed from the forthcoming book "Tora, Tora, Tora!" by Gordon Prange

THREE SUBMARINES sped through the black ocean swells 100 miles ahead of the main body of ships. Prowling low to the surface, they kept alert for the slightest hint of interception. Behind them churned the destroyers, cruisers, battleships and aircraft carriers of the attack fleet itself. The massive formation spread out across the sea for a distance of 100 miles. Yet this sprawling armada was lost in the endless reaches of the Pacific. It had sailed 3,500 miles from its home port completely undetected.

On the flight decks of the carriers, bombers and fighters were lined up in launching position, their noses pointed towards the bows as if eager for take-off. The plane mechanics, looking like shadowy gnomes in the eerie gloom, scurried to and fro making a final check on engines, radios, landing gear and fuel tanks. Machine-gun ammunition boxes were full; bombs and torpedoes were in their racks.

One of the mechanics smiled to himself as he came upon a message chalked on the side of a bomb: "This one will open the war with America."

For this was the First Air Fleet of the Imperial Japanese Navy, assigned to launch the surprise attack on Pearl Harbour—an act of utter treachery from which the Japanese did not shrink. Indeed this operation was a fantastic military gamble upon which a desperate nation had elected to stake its future.

In the pre-dawn hours of that morning of December 7, 1941, the atmosphere aboard the Japanese warships was grim. The veteran pilots, those with hundreds of flying hours behind them, felt more tense anticipation than fright. But, for the young officers who had barely completed their training, cold fear mingled with excitement. The untested pilots of the spanking new carriers *Shokaku* and *Zuikaku* were particularly nervous, and as they gulped



Take-off! Japanese pilots man their planes to launch the Pearl Harbour attack

down their pre-combat meal of green tea and rice balls they felt the food coagulate in their stomachs. After their final briefing many of the pilots paused before a miniature Shinto shrine to bow in silent prayer. Others said good-bye to their comrades among the ships' crews.

Uneasiness was by no means confined to the junior officers. The commander of the entire expedition, Vice-Admiral Chuichi Nagumo himself, had paced his cabin in sleepless anxiety throughout the voyage, convinced from the beginning that the mission was doomed.

The officer in charge of air operations, Commander Minoru Genda, felt overcome with awe at the responsibility that had been entrusted to him. Normally immune to worry, in the last hours before the launching he brooded on the danger of unforeseeable pitfalls. The day might bring a glorious victory, or—the ancestral gods forbid!—a stupendous failure. On his decisions, Genda reflected, rested the future of 100 million of his countrymen.

But his sense of trepidation did not last long. Did he not have a brilliant commander to lead the attack? And were not the majority of the Japanese pilots of the finest calibre, officers who would shine in any air force? In the end, Genda was sure, all their months of careful planning, their Spartan training, their precision tactics, would pay off. Staring out at the hostile, lonely sea, Commander Genda suddenly experienced a resurgence of confidence. "I found myself marvellously untroubled by any worry," he said, "with all care completely cleared away."

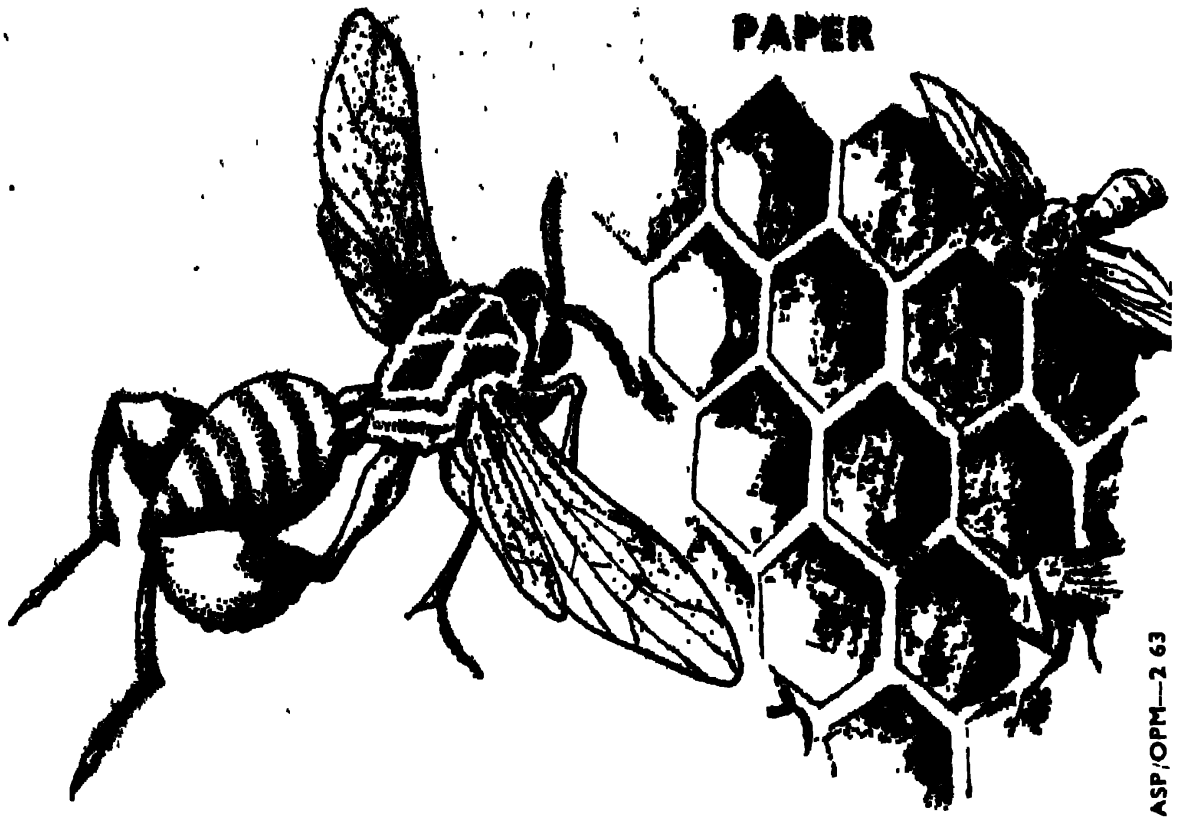
And then, above the thunder of the ships' turbines a sharper sound arose—the drone of aircraft engines. Two long-range seaplanes took to the air, bound on advance reconnaissance missions over the designated targets.

The arrow had left the bow. No one, now, could recall it.

This book has been in preparation for more than 16 years. It was written by the man who now knows more about the Japanese attack on Pearl Harbour than any other living person—Dr. Gordon Prange, professor of history at the University of Maryland. As a naval officer, Dr. Prange served with the U.S. Military Government in Tokyo. In October 1946 he transferred to General MacArthur's occupation staff as a civilian historian, and determined to devote such personal time as he could muster to uncovering the definitive story of Pearl Harbour from the Japanese side. During his remaining five years in Japan, and ever since, Dr. Prange has been studying and evaluating scores of previously unrevealed diaries, thousands of letters and war records. In addition, he has interviewed virtually every surviving Japanese officer who took part in the Pearl Harbour operation.

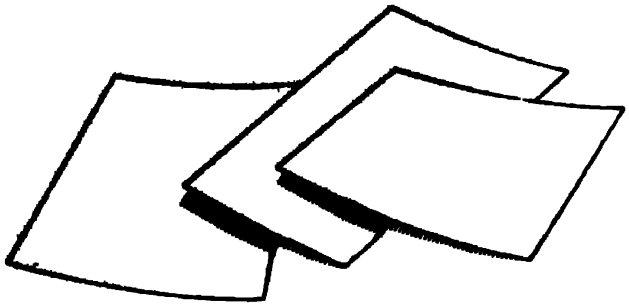
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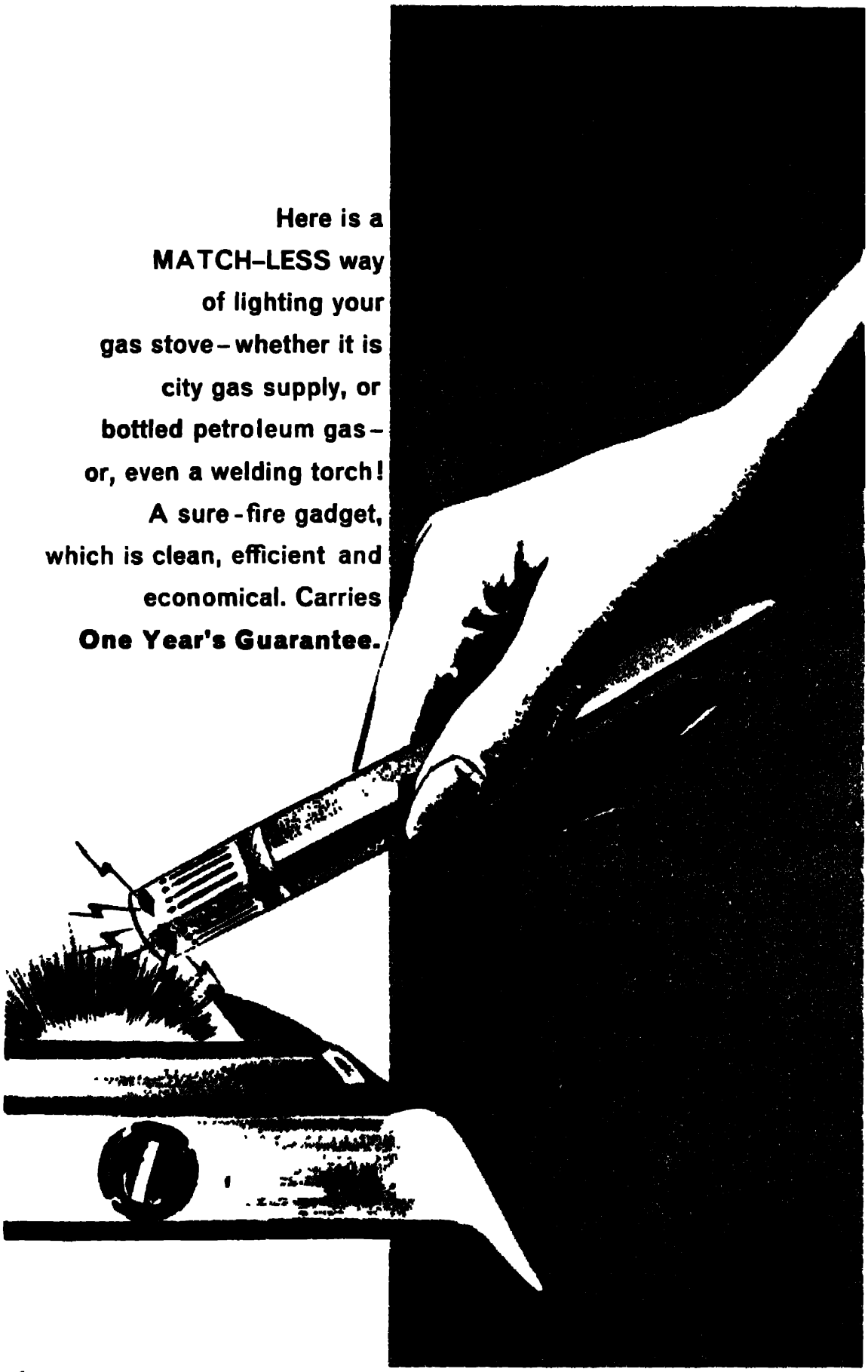
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The plan to strike Pearl Harbour had been conceived and pushed through against all opposition by the Commander-in-Chief of the Japanese Combined Fleet, Admiral Isoroku Yamamoto. The circumstance was ironical, for Yamamoto was a brilliant strategist who was flatly opposed to war with the United States. He had seen America's industrial might at first hand when he studied at Harvard University, and later when he served as a naval attaché in Washington.

"If I am told to fight regardless of the consequences," he informed the Japanese Prime Minister in the autumn of 1940, "I shall run wild for the first six months, but I have utterly no confidence for the second and third years. I hope you will endeavour to avoid a Japanese-American war."

How was it possible that a man who so clearly foresaw its consequences could have engineered the stroke that precipitated the war?

The answer is that Japan was already committed to a course that left Admiral Yamamoto no alternative. He was a prisoner of history.

The island empire of Japan has always been a land of exceptional beauty. But its mountainous terrain could hardly support a population which increased by millions each year, or supply raw materials for its efficient and ambitious industries. Consequently, the drive towards expansion had been compulsive. It sent the Japanese into Korea to



Admiral Isoroku Yamamoto, C.-in-C. of Japan's Combined Fleet

annex the "Land of the Morning Calm" in 1910, into Manchuria in 1931, and into China in 1937, and engulfed them in an upsurge of nationalism as wild as the typhoon-ridden sea which surrounds the inhospitable soil of their homeland. And so, blinded by hopes of a glittering destiny, they were lured into attempts at conquest as mindless and as suicidal as the periodic migrations of Norway's lemmings into the sea.

The Japanese had long dreamed of bolstering their empire by exploiting the resources of the rich lands to the south—the Philippines, Malaya and the Netherlands East Indies. By 1939, when Yamamoto became head of the combined fleet, obsession with the southern Eldorado had hardened into a grandiose

plan of conquest. The drain of the "China Incident," by 1941 dragging well into its fourth year of profitless and inconclusive war, had made this conquest even more desirable by acutely sharpening the need for metals and oil.

"It is my belief," said General Teiichi Suzuki, head of the Asia Development Board, "that if the key points of the southern area are securely possessed within three or four months, we would be able to acquire petroleum, aluminium, nickel, rubber, tin and so on in six months after that time. We would be able to make full use of these materials from about the second year of occupation."

Such a move would certainly mean war with the United States—as Yamamoto knew to his great regret. But make no mistake about one thing: Yamamoto was a robust nationalist and a Japanese to the very marrow of his bones. He loved Emperor and homeland with volcanic ardour, and his warrior heart followed the traditions of the true samurai: duty first.

Yamamoto believed, as did most people of Japan at the time, that the Japanese were a chosen race, selected by a far-seeing Providence to fulfil an ineluctable destiny. So, in his pattern of thinking, it was only logical for Japan to play the dominant role in the Asian community of nations.

The most formidable obstacle to the Southern Operation (for which his post made him largely responsible) was the U.S. Navy. If the operation was to succeed, this troublesome aggregation of sea power would have to be barred from southern waters, at least during the first critical months. How could this be done?

Yamamoto's approach to the problem was conditioned by both training and temperament. He was an aviation expert, a bold, original thinker, and a gambler. He liked to quote maxims, and one of his favourites was, "If you want the tiger's cubs, you must go into the tiger's lair."

Inevitably, his eyes were now drawn to the tiger's lair at Pearl Harbour, Hawaii, where the U.S. Pacific Fleet was based. Would it be possible to destroy this fleet before the Southern Operation began?

"Difficult, But Not Impossible"

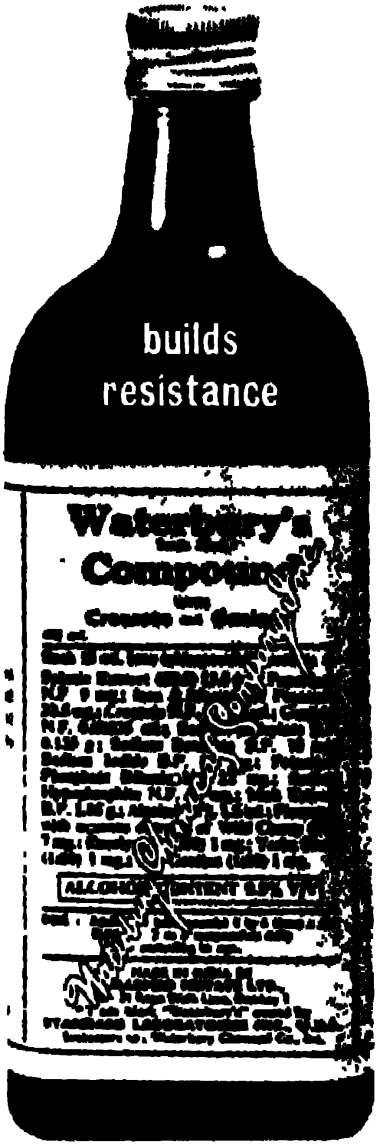
ONE DAY in January of 1941, Yamamoto repaired to his cabin on the flagship *Nagato* and wrote to his close friend Admiral Takijiro Onishi, who was one of the few genuinely air-minded admirals in the Japanese Navy.

Cautioning Onishi that the subject was to be kept top-secret, he swiftly brushed out a three-page letter outlining a plan for a surprise air attack on Pearl Harbour. Did Onishi think such an attack feasible? "Please study the problems involved carefully," Yamamoto requested in conclusion.

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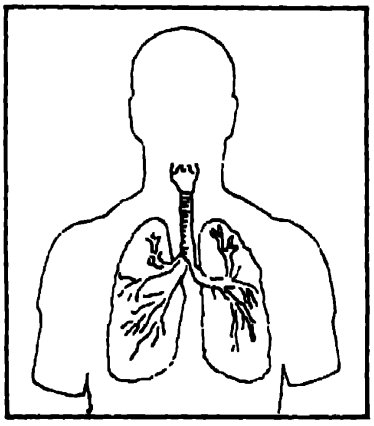






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One of Admiral Onishi's first moves was to summon Commander Minoru Genda, 36-year-old air officer on the carrier *Kaga*. He could scarcely have taken a more dynamic step.

Genda was the most brilliant airman in the Imperial Navy. His hawk-like, aristocratic face, with its thick eyebrows, straight nose and firm chin, was dominated by piercing black eyes of almost frightening intensity.

His ideas were bold and imaginative, and he had already considerably influenced the Navy's aviation tactics and design.

When Onishi showed him Yamamoto's letter, Genda read it thoughtfully. The daring and originality of Yamamoto's idea immediately appealed to him.

"The plan is difficult, but not impossible," he said.

Commander Minoru Genda, officer in charge of air operations



"Yamamoto counts heavily on smashing American morale by concentrating on battleships, and sinking as many of them as possible," Onishi informed Genda. Although carriers were superior as striking units, most Americans (as most Japanese) still considered the battleships the real backbone of the fleet. So, destroying them, Yamamoto felt, would deal a paralysing psychological blow.

Fantastic as it may sound, Yamamoto had also toyed with the idea that the attacking planes should not return to the carriers. The flat-tops would then not need to come in so dangerously close, and could start homeward the instant their planes had taken off. After making their attack, the pilots were to crash-land in the water and be rescued by destroyers and submarines.

Yamamoto presumed, with rare *naiveté*, that if this type of attack were used, the Americans might think the Japanese such a unique and fearless people that it would be useless to fight against them.

Genda torpedoed these notions on the spot. The prime target would have to be the U.S. carriers, he said, since these offered the most danger to the Japanese Navy. And, to get the best results, all Japanese carriers would have to approach as close as possible to Pearl Harbour. A one-way attack would have a bad psychological effect on the pilots, and crash-ditching in enemy territory would mean a needless waste of

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planes and of highly trained airmen. Moreover, for the carriers to start home without planes would invite disaster if the Americans were to counter-attack.

Genda returned to *Kaga* bursting with ideas, and went to work at once. Two weeks later he gave Onishi a complete draft of the projected attack.

Every available flat-top should participate, he thought, and the attack should be made around dawn so that most of the approach would be under cover of darkness. The aircraft should include dive bombers, high-level bombers, torpedo planes and fighters. Torpedoes should be given priority over bombs because they were more destructive and, on a close run-in, more accurate. Although the water at Pearl Harbour was too shallow for any torpedo the Japanese then had, Genda remained firm. Torpedoes were essential; the shallow-water problem would simply have to be solved.

Onishi approved nearly all Genda's ideas, added a few of his own, and the draft he forwarded to Yamamoto early in March was essentially the plan finally used. Within a month it was being implemented, by putting into effect a strategic concept long advocated by the naval pilots. Five carriers, then assigned to separate forces, were assembled with ten destroyers, two to each flat-top, to form the First Air Fleet.

The move met strong opposition



Vice-Admiral Chuichi Nagumo
Commander-in-Chief of the First Air Fleet

from the "battleship admirals," who knew nothing of the Pearl Harbour plan (and would not have approved of it if they had). But Yamamoto ploughed ahead without once looking back, and from now on Genda worked on the operation like one possessed, living it each day with the religious intensity of a monk.

Yamamoto would have dearly loved to lead the new fleet himself, but since he was indispensable where he was, the post went to Vice-Admiral Chuichi Nagumo, largely on the basis of seniority. Nagumo was an unimaginative old-line sailor, an acknowledged authority on navigation and ship manoeuvres. None of his long and honourable career had had the slightest connexion with aviation, however, and when he was informed of the Pearl Harbour plan he was aghast. Sending a large task force cavorting across 3,500 miles of angry ocean

into the very citadel of the enemy's power demanded a close look at the risks involved.

Nagumo felt strongly that the mere feat of getting to Hawaii undetected, refuelling *en route*—a difficult operation under the best conditions—and arriving there according to a pinpoint schedule was an insuperable problem. And since the raid's success depended almost entirely on surprise, chance discovery could cost Japan much of her navy, and lose the war in a single day.

For the moment, the phlegmatic Nagumo took comfort in believing that the reckless plan was unlikely ever to be carried out. First, war against the United States was by no means certain; negotiations with her were still going forward. (In an act of calculated deception, Japan continued these talks to the very moment the first bombs fell.) Second, Yamamoto had exceeded his authority in concerning himself with such a plan at all; the planning function belonged to the Naval General Staff. Unless that body approved Yamamoto's project—which Nagumo thought unlikely—it was doomed to collect dust in the secret files.

The Emperor Speaks

Despite Nagumo's hopes, the inexorable march towards war continued. In late July, Japan established a "protectorate" over French Indo-China, and elements of her "New Order," already occupying the northern part of the country, moved swiftly to take over the whole. A few days later, President Roosevelt froze all Japanese assets in the United States; prohibited Japanese vessels from loading or unloading cargo in any U.S. port; and, having already stopped shipments of iron and scrap the year before, now also barred sales of U.S. petroleum to Japan. Britain and the Netherlands took similar measures.

"Economic war is already declared," said a Japanese newspaper. "It is not difficult to imagine what will come next."

On September 6, Emperor Hirohito convened Japan's leaders for a grim stocktaking. They gathered round a long, rectangular table in the No. 1 East Room of the Imperial Palace, with the Emperor on a dais at the head.

His Majesty sat motionless and seemingly impassive as Prime Minister Fumimaro Konoye opened the conference by reading an "Outline Plan for National Policy," which disclosed that:

1. The empire was determined to risk war with the United States, Britain and the Netherlands to achieve its economic ends, and war preparations were to be completed by late October.

2. Until that provisional cut-off date, the empire would try to realize its demands through negotiations.

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however, doomed the negotiations to failure, since their fulfilment would secure for Japan a powerful empire while virtually tying the hands of the United States, Britain and the Netherlands in the Far East.

One by one the various leaders now stood up and discussed the situation. All emphasized the need for haste. Japan had to act while she still had stockpiles of essential materials, since British hostility and the U.S. embargo made it impossible to replenish them. General Suzuki, for example, pointed out that scarcely more than a year's supply of oil remained.

Last to speak was Baron Yoshimichi Hara (speaking for the Emperor). "The outline of national policy," he said, "left the impression that war was stressed and diplomacy given secondary consideration. Am I right in believing that everything possible is being done to save the situation by diplomatic means?"

There was a brief silence. Then Admiral Koshiro Oikawa, the Navy Minister, hastily gave his assurance that this was so. But apparently he was not convincing. Presently, to everyone's astonishment, the Emperor himself rose to address the conference.

Never before had Hirohito addressed an Imperial Conference personally. Yet there he stood, the living symbol of empire, Japan's 124th emperor, shedding his "divine radiance."

He took from his pocket a poem entitled "The Four Sides of the Sea," written by his grandfather, Emperor Meiji. With all members of the conference hardly daring to breathe, Hirohito in a mood of high seriousness read the poem aloud:

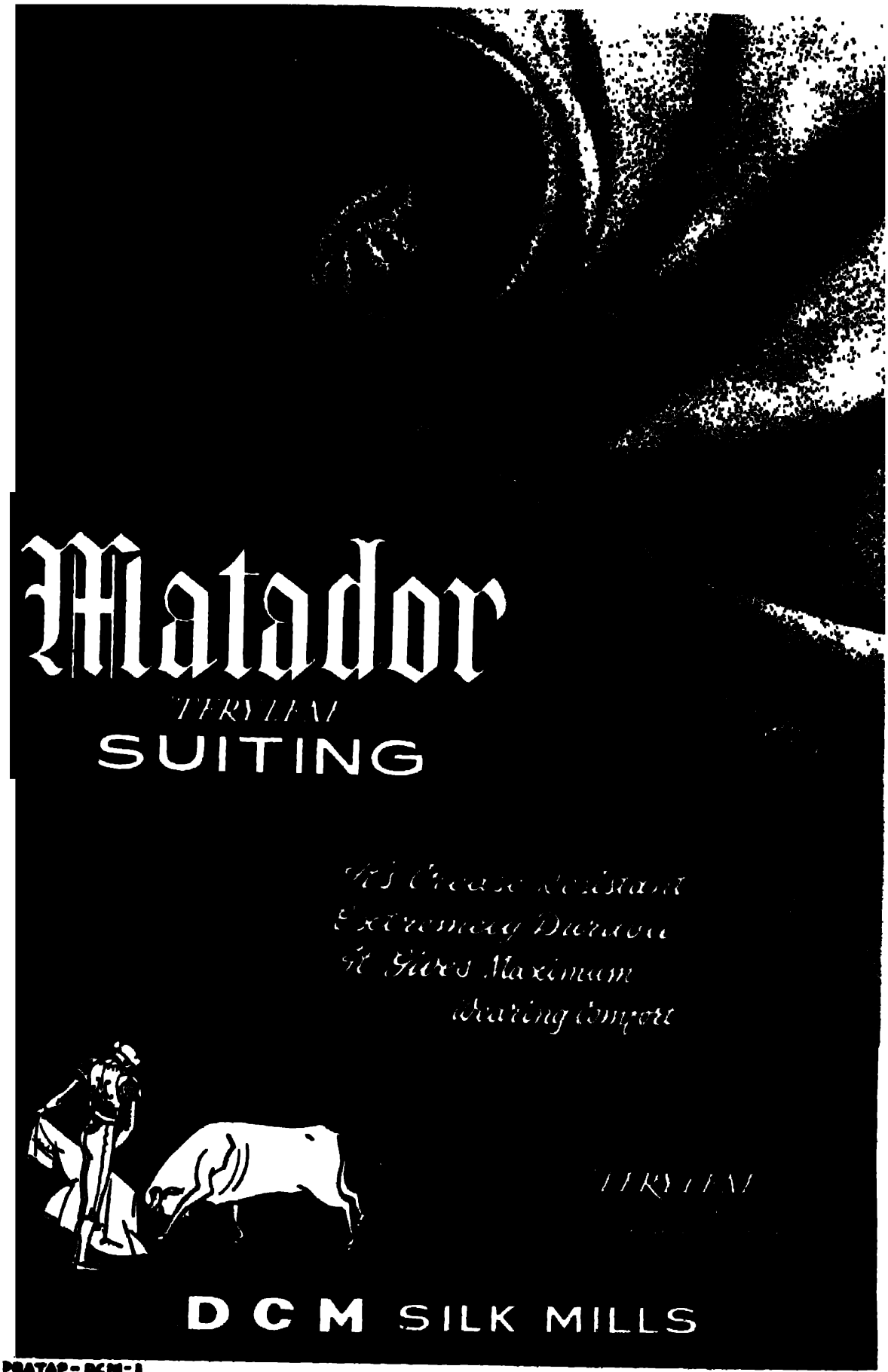
> I think all the people of the world
> are brethren.
> Then why are the waves and
> winds so unsettled today?

The Emperor told his listeners that he had read the poem over and over again. Why wasn't it possible to introduce into the present his grandfather's ideal of international peace?

A taut stillness ensued, until finally the chief of the Naval General Staff answered that certainly the Supreme Command recognized the importance of diplomacy; they

Emperor Hirohito



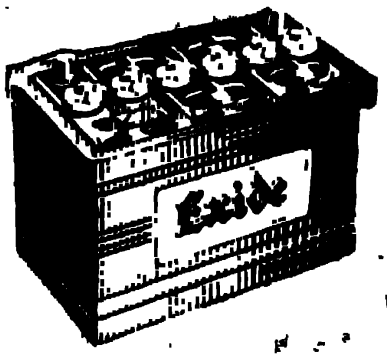

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advocated armed force only as a last resort. The chief of the Army General Staff echoed this opinion, but the Emperor was far from satisfied. The conference adjourned, Premier Konoye wrote, "in an atmosphere of unprecedented tenseness."

Those who believe that Hirohito could have vetoed the Pearl Harbour plan had he wished, or had he been a stronger character, do not understand the Emperor's subtle and complex position. He could only counsel—and ratify. For the Emperor must be at one with his government to preserve the monolithic unity of the nation. He was lashed to the mast of his own boundless prestige.

At this juncture, however, Emperor Hirohito did not even know of the projected Pearl Harbour attack.

Revolt of the Admirals

THE ANNUAL indoor naval games, played with model ships on charts at the large grey building of the Naval Staff College in Tokyo, were normally held in November or December.

Because of the urgency of the situation, they were now pushed up to September 11–13, and the Naval General Staff (which had no enthusiasm for the project) reluctantly agreed that the First Air Fleet could try out a theoretical attack on Pearl Harbour.

The tireless Genda had worked out three possible routes for approaching Oahu: a southern, a central and a northern course. The northern was the shortest and least-beaten track, but Nagumo favoured the southern route, holding that in late autumn the foul weather in the north would make that course impossible.

"If you think it is bad," Genda told him, "remember, the American admirals will think the same." Nagumo agreed to the northern approach for the exercises.

The first attack was a relative failure. The Japanese Red Team, representing the United States, carried out anticipated U.S. defence measures and spotted Nagumo's force early in the morning. In the skies over Oahu the attackers flew into a nest of interceptors. The umpires ruled that Nagumo lost half his planes and that two carriers were sunk and other units heavily damaged in the counter-attack that followed.

A second try did better. Coming in directly from the north, with split-second timing that kept them beyond the range of American reconnaissance planes during daylight hours, the fleet was theoretically not spotted, and the attack was a surprise. The umpires ruled that U.S. losses were heavy, and that, except for a number of planes shot down, the Japanese task force escaped unscathed.

Surprisingly, this demonstration aroused strong opposition to the plan. Some critics thought the whole

scheme unwarrantedly reckless. Others, with their eyes fixed on the Southern Operation, felt that this alone would strain Japan's naval resources to the limit. Lastly, the battleship admirals were honestly convinced that it was a mistake to rely on ships as thinly armoured as were the carriers.

For the battleship concept was still powerful in the Japanese Navy, as witness the super-battleships then under construction. Not 33,000-tonners like Yamamoto's flagship, *Nagato;* not 35,000-tonners like H.M.S. *King George V* or the new U.S. *South Dakota* class; not 45,000-tonners like the big boys the Allies produced later in the war—H.M.S. *Vanguard* and U.S.S. *Missouri*—but full-scale monsters of the naval deep like *Musashi* and *Yamato*, ships with a net displacement of 62,000 tons, the largest the world had ever seen, with nine 18·2-inch guns to growl from their decks.

Knowing that these leviathans would be splashing through the seas in late 1941 and early 1942, the Japanese battleship admirals breathed a serene confidence in their doctrines of sea warfare, and a corresponding distrust of naval-airpower concepts. In the month after the September war games, officers who were determined to halt the dangerous Pearl Harbour plan held at least half a dozen clandestine meetings.

But in Admiral Yamamoto these conservatives were up against an opponent of formidable strength. A photograph of Yamamoto taken at the height of his power reveals a man short even by Japanese standards—five foot, three inches. His broad shoulders were accentuated by massive epaulettes, and his barrel chest was crowded with medals and orders. The effect would be comic except for the face. Full-lipped, straight-nosed and large-eyed, with grey hair worn in an uncompromising crew cut, it is the face of a man of action, of immense willpower.

As a youth, he had been fanatical in his devotion to his studies. To concentrate more intensely, he would peel off successive layers of clothing in the hope that the cold might chase away fatigue. Many a freezing night his parents had found him almost naked in his small room, poring over algebra or a book of geometry.

Yamamoto Plays His Ace

When he heard about the "babbling" against Pearl Harbour, Yamamoto on October 11 summoned about 50 of his fleet commanders to the flagship *Nagato*, ostensibly to review their war plans. After a day-long rehearsal of manoeuvres and a congenial dinner, the group assembled on the quarterdeck for a final conference. This was to be off the record, they were assured, but now was the time to bring up any objections they might have to Pearl Harbour.

One by one, various admirals

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voiced their misgivings. Time was running perilously short for operations in the northern Pacific. High seas and bad weather would make refuelling impossible. Moreover, Soviet Russia had to be watched. Even Admiral Onishi, in whom Yamamoto had confided in January, now believed the plan unwise with the available carrier-plane forces. Nagumo, who spoke last, rumbled on at length about the risks. What if the Americans were fully prepared, he asked, and luring the Japanese into a disastrous trap?

"The general feeling of the high-ranking officers was that it was too late," said Genda. "The political scene had deteriorated so far that the U.S. Navy would be making preparations to meet a surprise attack."

The last flush of sunset had almost died on the horizon when Yamamoto arose. He began slowly, but with unmistakable determination. He had noted the points made, he said, and they would be considered. But he had been studying the entire strategic situation a long time. The operation against Hawaii was essential to Japan's grand strategy. Without it the southern thrust would fail. Therefore he wanted one thing understood: "So long as I am Commander-in-Chief of the combined fleet, Pearl Harbour will be attacked."

The statement cleared the atmosphere once and for all. Every fleet commander knew that from now on there would be no more bickering, no more complaints. If Japan fought, the fleet would go to war with the exhilarating unity of a great crusade.

But the Naval General Staff was still adamantly opposed to Pearl Harbour, and here Yamamoto was not dealing with officers under his command, but with the pinnacle of naval hierarchy. Yamamoto was not a good poker player for nothing, however. Late in October he decided to send an emissary to the Naval General Staff for a showdown. He picked his senior staff officer, Captain Kameto Kuroshima, for the task, and armed him with a final, bold weapon, if nothing else availed.

Kuroshima went straight to Captain Sadatoshi Tomioka, chief of the Operations Section of the Naval General Staff. He did not dally with niceties. "Admiral Yamamoto has ordered me to get immediate clarification on the Pearl Harbour operation," he announced. "Will it be approved or not? Time is running short. We must have an answer without delay."

Tomioka, not to be stampeded, paraded all the standard criticisms of the scheme. Kuroshima rebutted with Yamamoto's best arguments, but he saw at last that he was getting nowhere.

"Admiral Yamamoto insists that his plan be adopted," he said. "He has authorized me to state that if it is not, then he can no longer be held responsible for the security of the empire. He will have no alternative

but to resign and with him his entire staff."

Tomioka's eyes went wide, his mouth fell open. The hugeness of the threat impressed him deeply. Still he agreed to the attack only as far as he personally was concerned. So Kuroshima was passed to the next man in line, and, once more, hurled Yamamoto's thunderbolt. Finally the Naval General Staff, acting as a body, sanctioned the Pearl Harbour attack. It was a great victory, but Yamamoto's position and influence in the Japanese Navy were unique. Not once did any member of the Naval General Staff, or any one else, consider going to war without Yamamoto at the helm of the combined fleet. "It was inconceivable," one of the admirals said later.

Espionage on Oahu

FROM THIS time on, Japanese espionage in Hawaii was urgently stepped up. Regular reports on which U.S. warships were in port no longer sufficed. Instead, Tokyo now had to know exactly where each ship was berthed, and innumerable questions were asked about air patrols and the disposition of planes.

Most of this information was to be had by perfectly legal means, simply for the looking. Certain members of the Japanese consulate

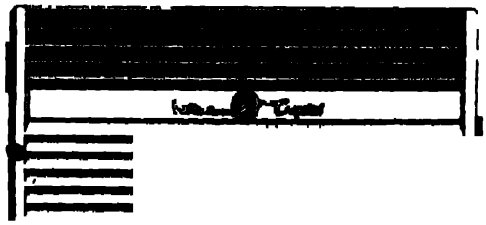
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in Honolulu made an efficient team for this task, the star performer being a young clerk who called himself Tadashi Morimura. His actual name, however, was Takeo Yoshikawa, and he was a former ensign in the Imperial Navy.

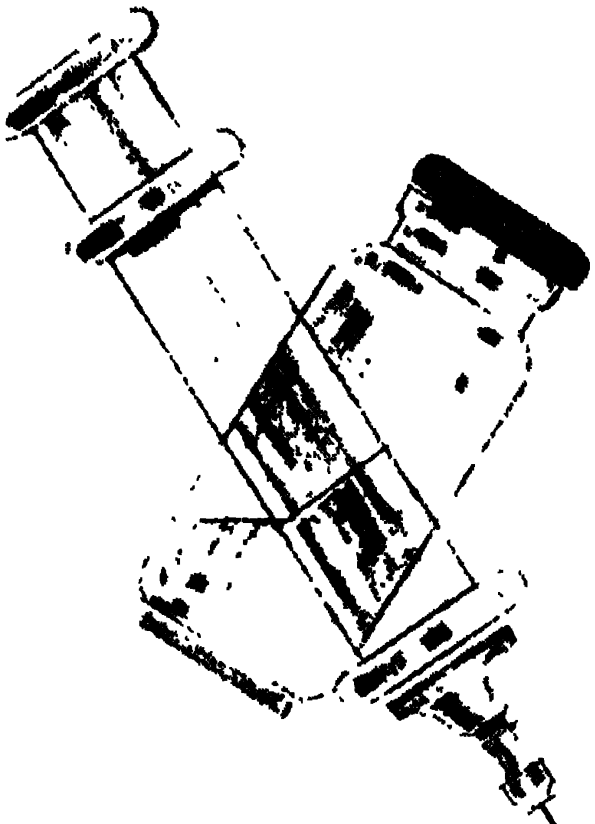
When Yoshikawa arrived in Hawaii on March 28, 1941, he reported to Consul-General Nagao Kita, a career diplomat recently transferred to Honolulu to work with him. Examining his new junior with interest, Kita saw a slender, handsome lad of medium height who seemed much younger than his 29 years and wildly unlike a master spy. Indeed, he appeared touchingly naive, the type older men call "son," old ladies fuss over and young girls flutter round. He had had no previous experience as an agent, and moreover he had lost the first joint of his left index finger—just the sort of disfigurement that could be a dead give-away, Kita wondered whether Yoshikawa was the man for the job.

But Tokyo did not make mistakes in such matters. Yoshikawa's very lack of experience was an advantage, as he had never appeared on a list of attachés to arouse the curiosity of U.S. intelligence agencies. And his preparation was exemplary. Coming from a modest background (his father was a policeman), he attended the naval academy and had served as an ensign for about a year



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when illness forced him to retire from the Navy.

His taste of salt water had spoilt him for civilian life, and for months he moped unhappily. Then a naval personnel officer visited him and suggested that the Navy could still find a place for him if he was willing to serve as an intelligence agent. He would have to forgo all hope of advancement; but this seemed a small price to pay for return to his beloved Navy.

Instructions to Yoshikawa were simple. He was to become an expert on the U.S. Pacific Fleet and its Guam, Manila and Pearl Harbour bases; and he was to improve his English. For the next four years he remained on the American Desk, studying *Jane's Fighting Ships* and *Aircraft*. In time he knew every U.S. fighting ship and aircraft by name, outline and technical characteristics.

In late 1940 he was instructed to take the Foreign Ministry's English-language examinations so that he could be appointed a junior diplomat to "cover" his true mission. According to the assistant chief of Naval Intelligence at the time, this arrangement was not unusual. A naval officer would be cashiered and deliberately made a civilian. He would then get a job in the Japanese Foreign Office and be sent where he could do the Navy the most good. In general, this procedure fits Yoshikawa's case: a discreet hint to the Navy's medical corps that Ensign Yoshikawa would be more valuable out of uniform than in, a suitable period of idleness to put him in a receptive mood, and then . . .

In Honolulu, after being assigned a nominal job—he was officially registered with the U.S. State Department as chancellor of the consulate--Yoshikawa plunged into work. He read the Honolulu papers from beginning to end each day, paying particular attention to shipping news and to social items about U.S. naval personnel. A daily stroll through Pearl City gave him a perfect view of Ford Island and its airstrip. And, two or three times a week, he stopped for a snack at a lunchroom and soda fountain run by an elderly Japanese on the pier at the end of the Pearl City peninsula. This was just opposite Ford Island, and the nearest he could get to Pearl Harbour. Here he could learn many things—Was the fleet going out too soon? Was it taking on new supplies?—by direct observation. At night, he frequented bars popular with American servicemen, listening to service gossip but seldom posing direct questions lest he attract attention to himself.

Fear of detection always kept him edgy, for the shadow of the FBI hovered over him unceasingly. Kita had warned him of that formidable organization, and he was constantly afraid it would install recording mechanisms in the consulate or in one of the restaurants he frequented. Yoshikawa often reported to Kita late at night, after the rest of the

staff were in bed; and he and Kita would carry on their top-secret discussions by writing notes to each other, then burning them.

Yoshikawa became a boon to Honolulu's taxi drivers, taking many drives and sometimes changing cars several times on the way. Kita vetoed his having a car of his own as too dangerous. The number plate would make him too easy to identify and trail, and the slightest accident would mean an embarrassing police report.

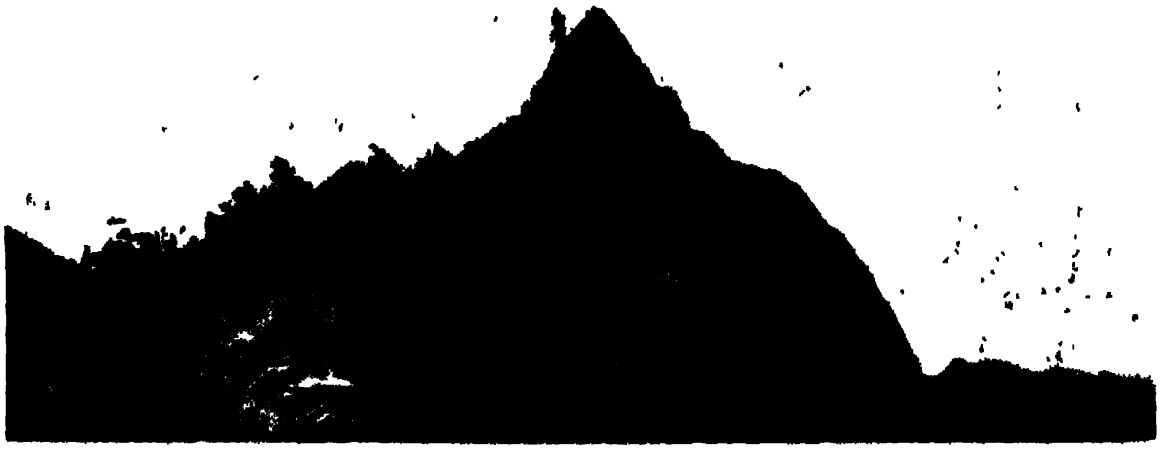
Hawaiian tourist traffic offered Yoshikawa many opportunities. Until the United States embargoed all trade with Japan, he would meet each incoming Japanese ship, round up a group of disembarking Japanese nationals, and take these unsuspecting and pleasantly surprised travellers on sight-seeing tours.

This gave him cover for the large number of trips he made, which might otherwise have become suspicious. Once he donned his brightest Hawaiian shirt and took one of his geisha friends for a tourist flight over Oahu, a jaunt that give him a clear air view of both Wheeler and Hickam airfields. He also scouted the airfields from the water, sometimes on fishing trips, sometimes as a swimmer.

The cane fields at Aiea gave the best possible view of Pearl Harbour. Several times Yoshikawa dressed in workman's clothes and studied the fleet from there, using a different cane field each time, and never staying longer than 30 minutes.

One of Yoshikawa's favourite haunts was *Shuncho-ro* (Spring Tide Restaurant), a Japanese-style teahouse on Alewa Heights that commanded an excellent view of Pearl Harbour and Hickam Field. Sometimes he would feign getting too drunk to be moved, and the friendly *Shuncho-ro* management would discreetly tuck him away for the night in a room overlooking the harbour. On one occasion Yoshikawa

Master spy Takeo Yoshikawa on Oahu island, where Pearl Harbour is situated



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saw the fleet steam out of the harbour in the early morning—a majestic sight to thrill the heart of any sailor. He watched with keen professional interest, checking the length of time necessary to get the fleet out, the type of manoeuvre used and the position each ship assumed. This was important information for Tokyo, for if the U.S. fleet attempted to sortie when the attack commenced, the Japanese could adjust their schedule accordingly.

On August 7, when Wheeler Field held an "open day" to which the public was cordially invited, Yoshikawa was among those who eagerly accepted the invitation. Cameras were strictly forbidden, but this prohibition bothered him not at all. He saw everything, missed nothing, and wrote up his impressions the moment he returned to the consulate.

Yoshikawa's schedule was killing. Holidays did not exist for him, and Sunday was just another day. Although Japan had other espionage networks in Hawaii, Yoshikawa considered them, with some reason, the work of amateurs.

The Sleeping Giant

WERE American leaders aware that Pearl Harbour was a potential target? Certainly!

"If war eventuates with Japan," Secretary of the U.S. Navy Frank Knox wrote to the U.S. Secretary of War Henry Stimson on January 24, 1941, "it is believed easily possible that hostilities would be initiated by a surprise attack upon the fleet or the naval base at Pearl Harbour."

Three days later (scarcely two weeks after Yamamoto had confided his scheme to Onishi) the U.S. Ambassador to Japan, Joseph Grew, sent a coded message to the U.S. State Department:

> My Peruvian colleague has heard from many quarters, including a Japanese one, that a surprise attack on Pearl Harbour is being planned in case of trouble between Japan and the United States. He said he was passing this on because it had come to him from many sources, although the plan seemed fantastic.

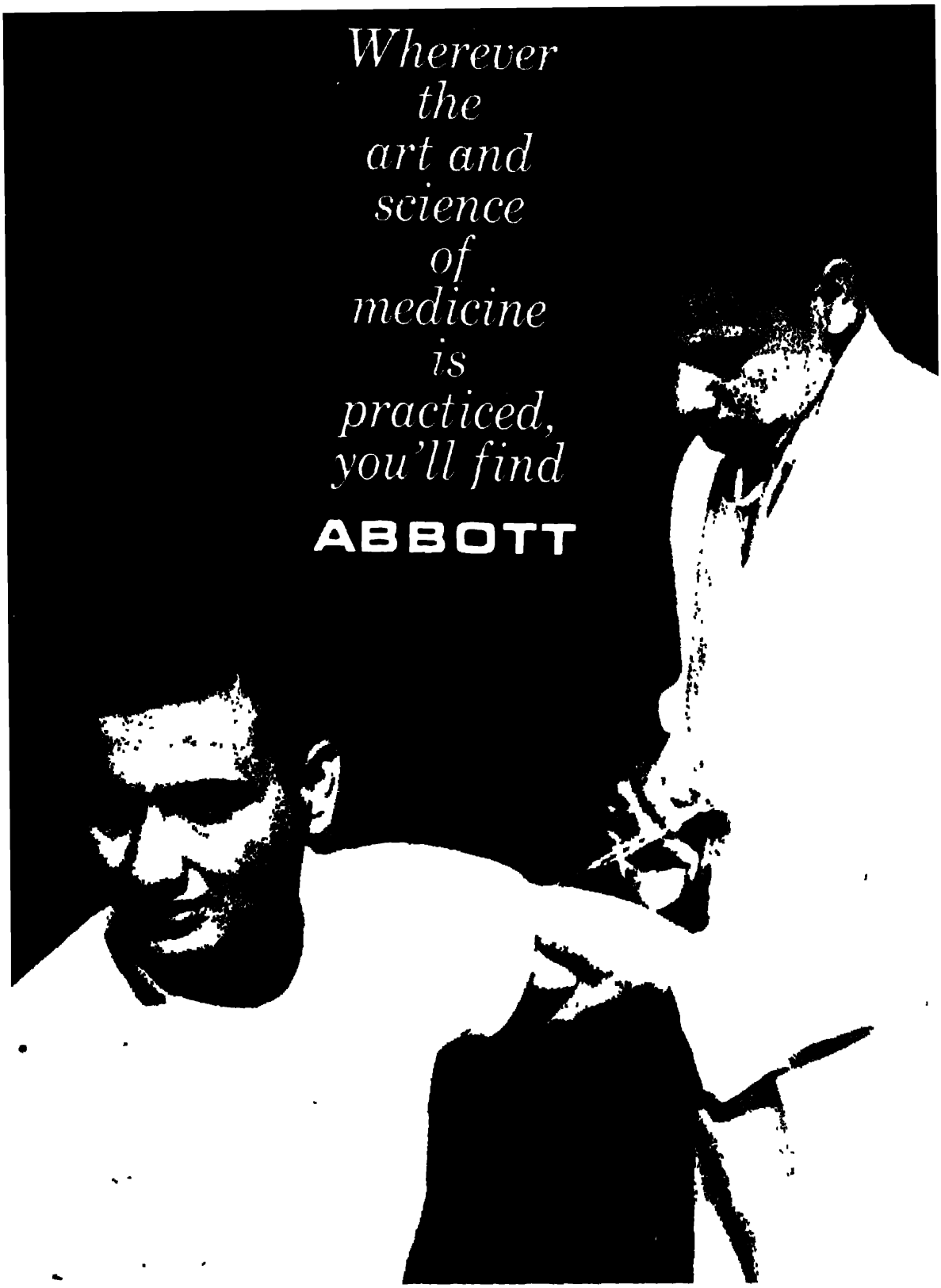
The State Department passed this tip-off—one of the greatest in history—to the Navy, which forwarded it to Admiral Kimmel, Commander-in-Chief of the U.S. Pacific Fleet, with this comment:

> The Division of Naval Intelligence places no credence in these rumours. Based on known data regarding the present disposition and employment of Japanese naval and army forces, no move against Pearl Harbour appears imminent or planned for in the foreseeable future.

Nevertheless, in a Pacific Fleet confidential letter on February 15, Kimmel assumed that "a declaration of war might be preceded by a surprise attack on ships in Pearl Harbour."

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This assumption was also included in three brilliant and startlingly accurate staff reports made in 1941. The last, a study of "the air situation in Hawaii," was prepared by Colonel William Farthing, U.S. commander of the 5th Bombardment Group of the Hawaiian Air Force. This prophetic document, sent to the U.S. War Department on August 20, suggested that Japan might stage a surprise attack on Pearl Harbour, probably using six carriers; that the most advantageous time to launch such an air strike would be at dawn; and that the most likely approach would be from the north.

To forestall such an attack, the report recommended among other defence measures that air patrols "maintain a complete and thorough 360-degree search of the Hawaiian area during daylight." To do so, the Hawaiian Air Force would need "180 B-17D-type aircraft or other four-engine bombers with equal operating range."

If planning could have killed, the Japanese would have been dead ducks. But the U.S. Army Air Force did not have 180 Flying Fortresses. And those available were heavily committed to the Philippines, to Britain and the Atlantic. Thus, when the Japanese struck on December 7, the U.S. Air Force had only 12 B-17's in Hawaii.

By the summer of 1940, U.S. cryptographers had broken the Japanese diplomatic code, one of the most brilliant *coups* in intelligence annals. Yoshikawa's espionage reports and Tokyo's replies, the entire flow of messages to and from the Japanese Embassy in Washington—all were therefore now open to the United States. But this vast treasure trove might as well have remained buried. Vital intercepts piled up untranslated, sometimes for more than a week. Dissemination, that most crucial of intelligence requirements, was faulty, partly from sheer ineptness, partly from a zealous anxiety to protect sources. Since dissemination might lead the Japanese to suspect that their code had been broken, information was often withheld from those who needed it most. Admiral Kimmel asserts that none of the so-called "Magic" intercepts ever reached him at all.

Underlying U.S. relations with the Japanese was a woeful underestimation of this gifted people. To most Americans, a Japanese was a funny little man with buck teeth and horn-rimmed glasses; industrious but literal-minded; an unimaginative copycat. Self-styled experts claimed that the peculiar structure of their eyes made the Japanese poor pilots. A diplomatic report of the mid-'30's read: "In the ear canals of the Japanese there is an actual physical defect by which a defective sense of equilibrium is produced."

Japan was a paper tiger, her war machinery flimsy, her aircraft a mess of "hybrid combinations," her naval ships top-heavy and inferior. In the



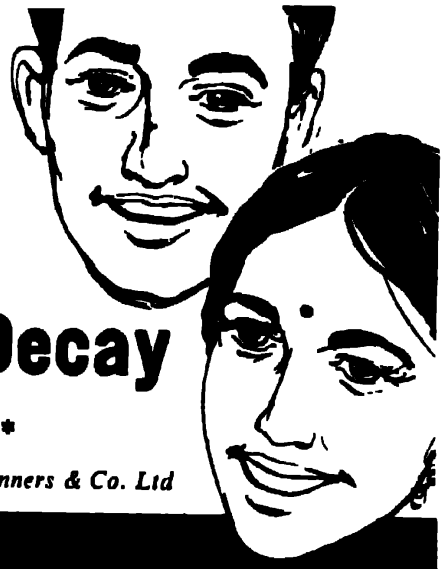
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event of a major conflict, her fragile empire would shatter like a teacup hurled against a brick wall. Japan's papiermâché cities made her the most vulnerable country in the world to air attack—"a bomber's dream." Moreover, she was suffering from pernicious military anaemia as her life blood poured into the vast river that was China; for her to challenge the might of the United States would be national suicide.

As for Uncle Sam's multi-million-dollar bastion in the central Pacific, that was safe and secure. "Pearl Harbour is probably the best naval base in the world today; no point is better situated, better defended or better supplied," wrote the U S. Secretary of the Navy nine months before "Bloody Sunday." Journalist Clarke Beach added on September 6, "A Japanese attack on Hawaii is regarded as the most unlikely thing in the world, with one chance in a million of being successful." Oracular experts and amateur strategists in almost endless profusion babbled the defence myth of the day: "Impregnable Pearl Harbour, Gibraltar of the Pacific."

Finally, as if by a magician's trick of misdirection, autumn saw the Americans turn their backs on Pearl Harbour to face the steadily mounting crisis in the Atlantic. The battle of the Atlantic shipping lanes reached a climax on September 4, when a German submarine torpedoed a U.S. destroyer near Iceland, and in the tumult, Japan was relegated to the back pages of American newspapers, never quite to regain the headlines until December 7. "The Pacific is still very much a part of the world situation," Kimmel wrote wistfully to Admiral Harold Stark, U.S. Chief of Naval Operations, on September 12. But Stark replied comfortingly, "Personally, I do not believe the Japs are going to sail into us." The mood was general. As Americans fixed their eyes on the Atlantic, they tended to forget that the back door was open.

Forging the Weapons

LATE IN September, Commander Genda began training the First Air Fleet pilots specifically for the strike at Pearl Harbour. The task was formidable, the more so since the need for absolute secrecy made it impossible to tell the airmen what they were being trained *for*. Different types of aircraft—high-level bombers, torpedo planes, dive bombers, fighters—had to be welded into a striking force capable of flying in perfect mass formation, not with just 40 or 50 planes but with several hundred. There was little time to accomplish this; time was running out with every tick of the clock.

The leader of such a force would need absolute mastery of his craft, endless patience and unusual qualities of leadership. Genda knew exactly the right man for the job: his naval-academy classmate, Commander Mitsuo Fuchida.

At 39, Fuchida was still an active pilot (as Genda was not). He was a veteran of the war in China, had logged over 3,000 flying hours, flew his plane as though he were part of it, and had the reputation of being the hardest-working officer in the Japanese Navy. When Genda told him of the Pearl Harbour plan, Fuchida took to it as a hawk to the wind.

The two men proved ideal foils for each other, Genda generating brilliant and daring ideas which Fuchida patiently hammered into practical reality. Like many gifted men, Genda regarded his own brilliance as the norm and was impatient when others were less mentally agile. Since tact was not his strong suit, he commanded admiration rather than affection, and lacked the gift of drawing men to him.

Fuchida, however, had been given this magnetic warmth at birth. His men instinctively turned to him, almost literally worshipped him. The First Air Fleet had drawn the cream of Japan's naval air arm—the spirited, the sensitive, the strong. Such men are never easy to handle, but from the start Fuchida controlled his mettlesome charges with a sure hand. As he later described it, "Genda wrote the script. My pilots and I produced it."

The script called for dive bombing with pinpoint accuracy. Fuchida delivered this by simply lowering the altitude at which the pilots released their bombs. The release point had been 1,950 feet; he made it 1,500. The tactic required the pilots to dive straight into the jaws of death and to pull out steeply at the last possible moment. But the men were happy to do it, and the accuracy of the dive bombers zoomed sharply upward.

High-level bombing was more difficult to improve. Japan had no equivalent of the United States' advanced Norden bombsight, and aiming depended solely on good eyesight and an intuitive feel for the right moment. The Navy's high-level bombing record was sorry indeed. Even in China, with scarcely any air opposition, its accuracy rate remained a dismal ten per cent or less.

But much can be accomplished through relentless, intelligent practice. Fuchida selected an outstanding bomb-aimer for the leading plane in each bombing squadron, saw to it that he always flew with the same pilot so that the two became used to each other, then set about developing the precision of their timing with unremitting practice. Farmers in the Izumi neighbourhood, where much of this training was done, complained that the constant din of engines had caused their chickens to stop laying. But in the end Fuchida achieved remarkable results. At a bombing contest held on October 24, with a target ship zigzagging at high speed through a strong wind, the bombers scored 50-per-cent hits. Against an



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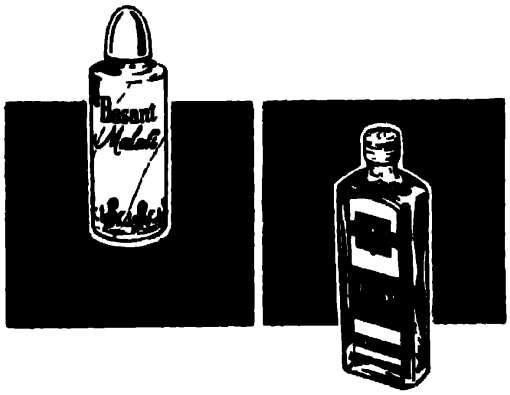
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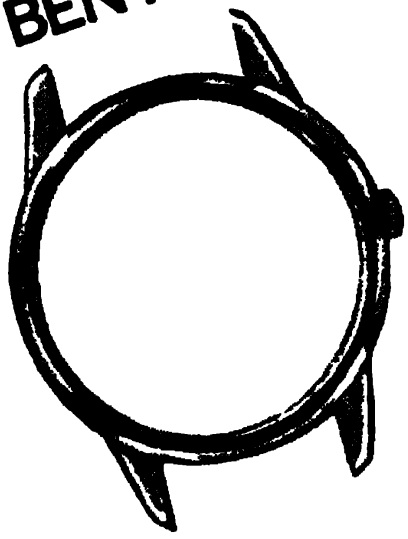
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anchored ship, Fuchida estimated that the same five-plane formation might score 80-per-cent hits. In effect, he had added a formidable new weapon to Japan's naval air strength.

A New Kind of Torpedo

AT FUCHIDA'S first briefing on Pearl Harbour, which occurred at a staff meeting aboard Nagumo's flagship, *Akagi,* Genda had outlined the problems in regard to torpedo attack. The U.S. ships were moored in double rows, and the inboard ships could not be reached by torpedoes at all. Moreover, the anchorage was so narrow that the outboard ships were only 1,600 feet from the other shore of the harbour, and on that shore were high cranes, chimneys and other dockyard-area obstructions.

Japan had no torpedo that was effective under the circumstances. The water in Pearl Harbour was only 40 feet deep, and no matter how low a torpedo plane flew before release, the existing torpedo would sink at least 70 feet below the surface before beginning its run. This would, of course, send it harmlessly into the mud.

Technicians were working furiously to perfect a torpedo that would run shallow from the start. If they succeeded, it would certainly be the most efficient means of destruction. So, would Fuchida set about training the crews anyway?

Kagoshima Bay was selected as a training site because it is shaped much like Pearl Harbour. An active 4,000-foot volcano in the bay represented Ford Island. Kagoshima City simulated the conditions of the U.S. Navy dockyard, with the Yamagataya Department Store passing for the main dockyard building.

On a clear, pleasant autumn day, Fuchida lined up his torpedo plane crews at Kagoshima and made a



Commander Mitsuo Fuchida

deliberately deadpan announcement. "You have just finished your preliminary training by engaging in a simulated fleet engagement at sea. Now, as an advanced course, you will train in shallow-water torpedoing against anchored ships."

Fuchida threw this out so casually that the crews took no particular notice of it. His assistant, Lieutenant-Commander Shigeharu Murata, who knew of the Pearl Harbour

plan, listened with sardonic amusement and said later that Fuchida would have made a fine actor.

If anything, the crews were rather baffled and annoyed. They considered it much more important to train in attacking a moving target, which was more difficult to hit. But torpedo accuracy was not Fuchida's major worry. With the huge, solidly anchored American ships as targets, hits were inevitable once the Japanese had a shallow-water torpedo.

"Since no training torpedoes are ready as yet," Fuchida told his airmen, "we will just go through the motions."

The instructions he gave were startling. The pilots were to climb to 6,500 feet, assemble north of the city and begin a run towards the bay. As they flew south, they were to drop to the tree-skimming altitude of 130 feet.

This was a shocker for the pilots. Fuchida, the stickler for safety regulations and for maintaining flight discipline, instructing them to fly at a height of only 130 feet over a city! More shocks were to come. As they passed over the Yamagataya Department Store, Fuchida continued, they would find a storage tank on the shore. Lining up on this, they would come down to 65 feet, hold the plane on an even keel at a speed of 150 knots and release the torpedo towards a target about 1,600 feet from the shoreline.

Fuchida's men were now almost beyond further surprise. At this level, the slightest mistake would send the planes into the bay.

After releasing the torpedo, Fuchida went on, each pilot would climb to the right and return to the base. He warned that this would be difficult. The aiming distance was short, and many obstacles would be encountered on such a low flight. Since the whole procedure would require a balance between boldness and care, Lieutenant-Commander Murata would run through the manoeuvre to demonstrate.

Taking him aside, Fuchida asked Murata, "Can you do it?" It was like asking the devil if he could sin. Murata, the Navy's acknowledged torpedo ace, was the type to have been willing to try the entire manoeuvre flying upside down.

The people of Kagoshima were greatly surprised that day to see plane after plane pour out of the valley towards the sea, barely clearing the roofs. Fuchida himself was quite satisfied. No one bungled.

Fuchida says that, as he watched, the scene seemed to fade, and he saw Pearl Harbour itself, with *Pennsylvania, Nevada, Saratoga, Lexington, Arizona* lying at anchor. Then he saw torpedoes leaving white trails, water spouts shooting skyward, the boom of explosions, listing ships, a fierce anti-aircraft barrage.

Torpedo-bombing instruction now took place daily, and the citizens of Kagoshima began to despair

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of the discipline of the Navy. Indeed, the authorities seemed to encourage the airmen to buzz the city at will.

Meanwhile, Genda was breathing down the neck of Navy Research, demanding a shallow-water torpedo. The harassed technicians methodically tested all the numerous fins and stabilizers that had ever been proposed for torpedo control. They got nowhere until, in their frantic search, they hit on a control system designed solely as an aerial stabilizer, and decided to try it for under-water running.

Surprisingly, it worked, although by no means perfectly. When the first batch of new torpedoes was ready, only about half kept to the desired depth. Further experiments eventually raised this to 80 per cent.

The development came barely in time. Even though the new fin was hurried into production, the first 30 torpedoes were not ready until mid-October. The last 100 could not be delivered until the end of November, and even then civilian workmen had to stay aboard the carriers, when they rendezvous'd in the Kuriles, to complete the final assembly there.

Special Intelligence Mission

"IF AN ENEMY leaves a door open, you must rush in," wrote Sun Tzu, a classic Chinese military authority much admired in Japan. The United States now left the door slightly ajar in Hawaii, and the Japanese rushed in to make a final intelligence *coup*.

In September, the Tokyo government opened negotiations aimed at getting the U.S. embargo on Japanese shipping relaxed. After weeks of discussion between Ambassador Kichisaburo Nomura and U.S. Secretary of State Cordell Hull, it was agreed that three passenger vessels could sail from Japan to Hawaii and the United States, provided they did not carry commercial cargo. The U.S. Government made this concession in good faith, believing that it would help to ease existing tensions. Japan, guided by Sun Tzu's typically Oriental philosophy, hastened to take advantage of the situation.

Tatuta Maru, first of the Japanese ships to sail, put into Honolulu on October 23. Shortly after the vessel docked, Consul-General Kita stepped aboard and the captain handed him a sealed envelope. It was from the Naval General Staff, asking, along with other requests, for a detailed map providing the location, size and strength of every military establishment on Oahu. A special mission would soon arrive to pick this up and to confer on other urgently important matters.

The mission consisted of Lieutenant-Commander Suguru Suzuki, who was an authority on U.S. air power in the Pacific, and Lieutenant-Commander Toshihide Maejima, a submarine expert. They were to make their own estimate of the situation at Pearl Harbour, then



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report back to the Naval General Staff in person.

Tatuta Maru, after stopping in Hawaii, proceeded to the United States. The second permitted Japanese ship, *Taiyo Maru,* which carried Suzuki and Maejima, was registered to go to Hawaii only. In Tokyo, a government spokesman explained to curious foreign correspondents that this was simply a matter of "convenience in scheduling."

Taiyo Maru sailed from Yokohama on October 22. The name of neither Suzuki nor Maejima appeared on the passenger list; Suzuki was listed as assistant purser, Maejima as the ship's doctor. Once beyond sight of land, the vessel turned northward and followed the northern route that the Pearl Harbour attack fleet planned to take. Throughout the voyage the two officers, taking turns day and night, carefully scanned the horizon.

The results were beyond expectations. Not a single vessel of any kind was sighted during the entire passage to Hawaii. The weather was uniformly auspicious — mostly leaden skies with just enough fog to provide a thin curtain of concealment. Not until the ship was about 80 miles off Oahu did the first U.S. patrol plane poke its nose through the clouds.

Taiyo Maru nudged into Honolulu harbour at 8.30 a.m. on Saturday, November 1. The timing was carefully planned. It was a week-end and the approximate hour of the projected attack. The liner anchored at Pier 8 near Aloha Tower, and from the stern the two officers could, with binoculars, keep a steady watch on Pearl Harbour and the surrounding area.

The ship was in port for five days. During the entire time both Suzuki and Maejima remained aboard ship. This was according to orders. The Naval General Staff wanted neither agent to be seen or questioned by U.S. officials; they wanted to arouse no suspicion of any kind. Consul-General Kita visited them three times in all, bringing two members of the consulate with him to carry materials on or off the ship. Thus, if a body search were unexpectedly made by U.S. counter-intelligence, nothing would be found on him. If a minor official were caught violating regulations, it might be explained away.

Kita did not allow the master spy Yoshikawa near the vessel, in case the FBI were trailing him, but Suzuki handed Kita a long questionnaire for Yoshikawa to answer. Among other things, the Naval General Staff wanted to know whether Oahu was on the *qui vive.* Would the Americans spring to arms at a moment's notice? Or could they be caught napping? Yoshikawa's answers were favourable.

Yoshikawa gave the detailed map, the long questionnaire and all his other findings to Kita, and one



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of Kita's assistants walked blithely up the gangplank with this precious cargo hidden under a local newspaper There was a general sigh of relief when the task was safely accomplished

Tuyo Maru sailed back to Japan on November 5 The passengers who embarked on her were subject to "one of the most extensive customs inspections to be held on Honolulu's waterfront' No contraband was found in the baggage or on the persons of any of them

Rendezvous in the Kuriles

THE PACE of preparation was now in crescendo On November 6 Fuchida staged a final dress rehearsal which duplicated the Pearl Harbour attack in every possible way, using a task force of six carriers and more than 350 planes and with the target ships 200 miles from the launching point as they would be at Oahu Two earlier dry runs had gone badly and Admiral Yamamoto had been displeased and highly critical This third run through was almost perfectly coordinated Yamamoto was too busy elsewhere to witness it, but from *Nagato* which served as one of the target ships, came the appraisal blinked in Morse *Kokegi wa migoto nari"* (The attack was splendid)

At their bases the ships now unloaded all unnecessary items such as small boats, sofas, extra chairs, decorations and personal belongings Every pound not required for

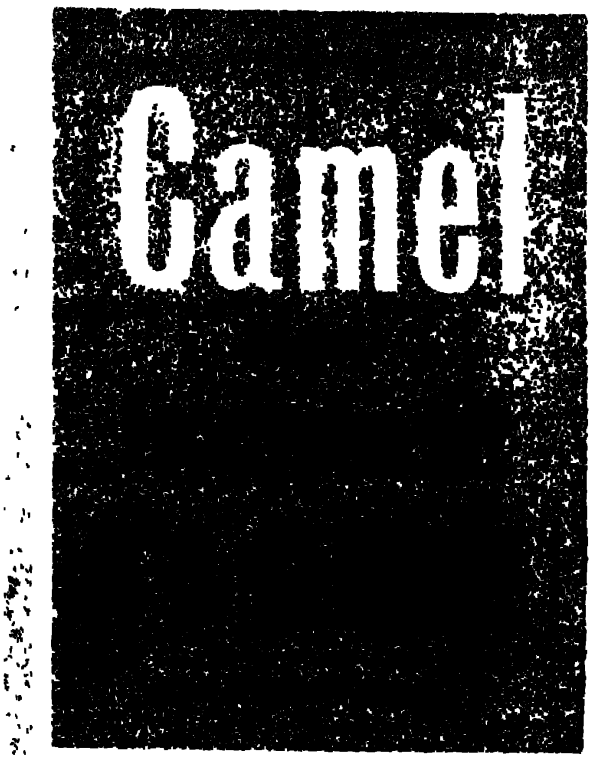
efficiency or safety was ruthlessly pruned away to strip the vessels for action and to make room for extra fuel. Numerous practice runs had left Nagumo reasonably assured that refuelling at sea would be possible; but every vacant or extra room, any gangway space that didn't need to be kept clear, even all decks (except the flight decks of the carriers), were stacked with oil drums.

Elaborate security measures were taken to conceal from the Japanese people the departure of the attack fleet. Both tropical and winter uniforms were issued so that there would be no tip-off that the fleet was going north. To minimize the exodus of so many carrier planes, near-by air units were instructed to send extra flights over the air bases and towns so that no sudden absence of planes would be noticed. All shore units were encouraged to grant leave to as many men as possible, so that plenty of bluejackets would be visible on the streets.

The fleet itself was to travel in total radio silence. The volume of messages and instructions from Japan would necessarily increase once the fleet was under way, but the Navy had been building up dummy traffic for several weeks so that there would be no noticeable upsurge of radio activity. Everything was to give the impression of "business as usual."

In the late afternoon of November 17, Yamamoto and his staff





boarded *Akagi*, then anchored in Saeki Bay, to wish key members of the fleet good fortune. Fuchida noted that Yamamoto looked sad and rather grim. He reflected that Yamamoto had not wanted war with the United States.

Yamamoto's speech was not the usual stereotyped pep talk. He told the men bluntly that although the Japanese hoped to achieve surprise, everyone should be prepared for "terrific American resistance." Japan had faced many worthy opponents in her glorious history—Mongolians, Chinese, Russians—but he emphasized that they would now face the strongest and most resourceful opponent of all. Clearly, Yamamoto wanted to deliver these men from the snare of overconfidence.

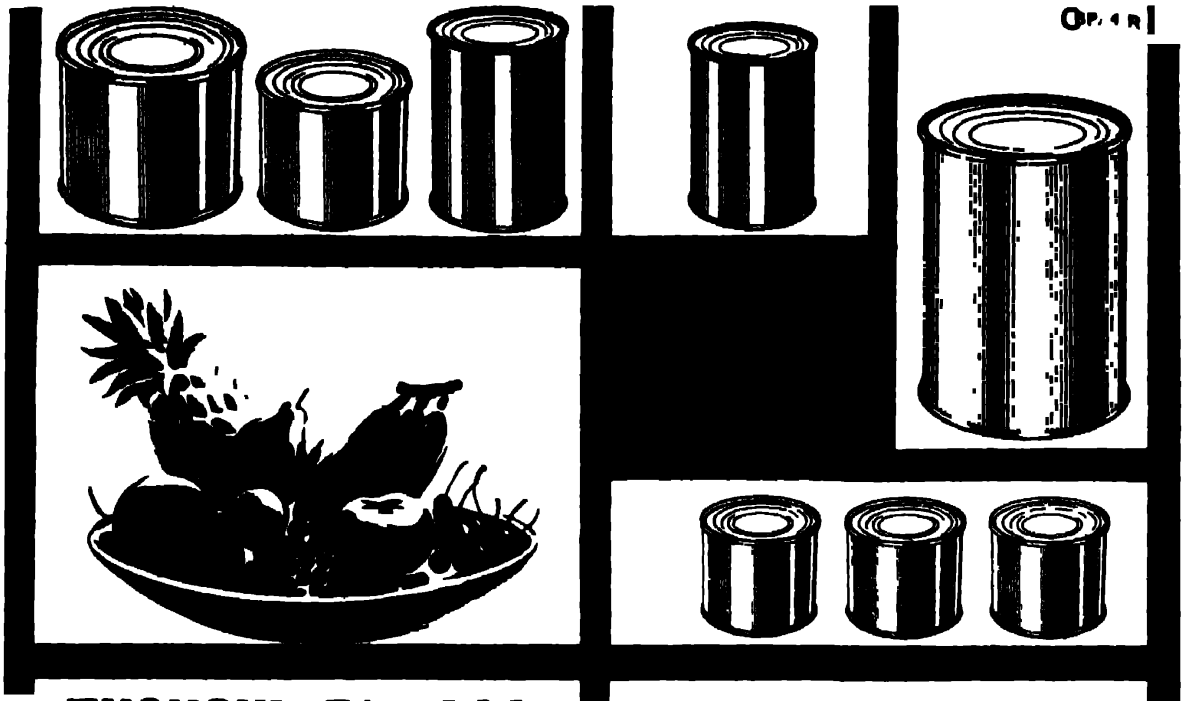
After the speech, a farewell party was held in the wardroom. The atmosphere was serious and full of dignity, even a little heavy. But during this interlude Yamamoto bared his true feeling. "I expect this operation to be a success," he said. By ritualistic custom, the commanding admiral usually merely expressed *hope* for the success of a coming mission. The positive confidence of Yamamoto's phrasing immensely heartened his hearers as they ate the symbolic *surume* for happiness and *kachiguri* for victory, then drank a toast to the coming battle in the name of the Emperor. *"Banzai! Banzai! Banzai!"*

As night settled, *Akagi* blacked out, weighed anchor and slipped out to sea in the silent company of two destroyers. Similar groups left harbours up and down the coast, some to sail close to shore, others as far out as 100 miles. There were 31 ships in all—six carriers, two battleships, two heavy cruisers, one light cruiser, three submarines, nine destroyers, eight lumbering tankers. Last to leave her base was the carrier *Kaga*, which had remained at Sasebo for repairs.

The spot picked for rendezvous was Hitokappu Bay, a bleak, craggy bight on Etorufu, one of the Kuriles or "smoking" islands—so named for their eternal mists. It lay almost 1,000 miles north of Tokyo in sparsely travelled seas, an ideal hide-out such as pirates might have used in buccaneering days. Except for two dismal fishing villages, there was no life in the area, and before Nagumo's force arrived, all communication with the outside world—telephone, telegraph and mail service—was abruptly cut off. There, in complete isolation, with snow falling intermittently from black winter skies, the most powerful carrier force ever assembled up to that time dropped anchor to await further orders.

"Our Mission Is . . ."

NAGUMO LOST no time getting down to business. At 8 p.m. on November 22 he summoned his staff to the carefully guarded room aboard *Akagi* where scale models of



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Pearl Harbour and Oahu, plus all the collected data on these prospective targets, were kept. Here Lieutenant-Commander Suzuki was to brief them on his recent intelligence mission to Hawaii.

Everyone was infinitely attentive as Suzuki began to speak. Much of what he told them about Pearl Harbour was not new, but any first-hand report was avidly welcomed now. He emphasized the U.S. fleet's habit of returning to its base every weekend; described the airfields in detail, even to the thickness of the hangar roofs; and listed the various components of the island's air strength (He overestimated U.S. Army air strength by almost 100 per cent, reporting 455 planes on Oahu; actually there were only 231 Army planes in all the Hawaiian Islands.)

All during Suzuki's report Nagumo sat immovable as an idol. Though he said not a word, his mind absorbed every point. When Suzuki had finished and awaited questions, all Nagumo's worries were anxiously voiced. What about the possibility of being discovered *en route?* Was the enemy alert? What was the probability of retaliation? What were the chances of not finding the U.S. fleet in Pearl Harbour at all?

Providing assurance on each point was a big order, and Suzuki could not hope to dispel all Nagumo's chronic fears. He could only repeat what he had already told the Naval General Staff in Tokyo: the facts in the case would seem to favour the task force.

The one sour note in Suzuki's report was his lack of precise information about U.S. carriers. Genda and Fuchida questioned him searchingly about the flat-tops, dreading the possibility that they might not catch these top-priority targets in their great strike. Suzuki could offer them no reassurance.

Bright and early the following morning, *Akagi* buzzed like a beehive as officers from every ship in the task force swarmed aboard to attend a special conference. Crowded into her wardroom were the commanding officers and key personnel of every vessel, and all officer members of the air attack forces. The atmosphere was tense with expectancy.

Nagumo opened the meeting with the announcement that their mission was to attack Pearl Harbour. A wave of excitement spread through the assembly, and there was a low murmur of voices. This was the first time he had openly revealed the task-force objective. Although many present had been privy to the plot for months, others were completely in the dark; some had naively thought they were on training manoeuvres.

Nagumo explained that it was still not absolutely certain whether the attack would be made. If negotiations between Japan and the United States should prove successful, the task force would be ordered

back; but if relations continued along their present hopeless course, there would be no alternative but to carry out the attack. It would be perilous, but it was of incalculable importance to Japan's war plan, and each man must do his utmost to ensure its success.

After Nagumo's chief of staff had sketched the general nature of the operation, the senior staff officer spoke of the precautions to be observed, and the duty of each unit during the dangerous voyage to Hawaii. Then the meeting was virtually turned over to the airmen. Genda alone talked for almost an hour, outlining courses of action to cover every possible contingency. Murata, Fuchida and others continued the discussions.

During the afternoon the flight officers of the two projected attack waves examined every possible phase of the attack. Since they and their crews were all candidates for the black badge of death, nothing was left to chance.

The Task Force Sails

ON NOVEMBER 25 the message Nagumo had been dreading arrived. Yamamoto ordered him to sail for Hawaii the next day.

> The first attack will be at dawn on X-day (to be given in a later order).
>
> In the event an agreement is reached in the negotiations with the United States, the task force will immediately return to Japan.

The fateful voyage began in the grey pre-dawn of November 26. Wreathed in the morning mists like ghost ships, the vessels of the great task force glided from their anchorage.

The first few days at sea were uneventful. The weather was ideal: light winds; dirty, leaden skies; enough fog to provide low visibility. Cruising speed was held to the 12- to 13-knot pace of the slow tankers.

To ensure radio silence, radio transmission keys were sealed or removed, and only flags and blinkers were used for inter-ship communication. All vessels maintained a strict blackout at night, and signals were then sent by specially focused, narrow-beam blinkers. Aboard the tankers every effort was made to reduce the large volume of black smoke usually emitted.

None of these security measures could dispel the dead weight of suspense which bore down on Nagumo almost from the moment of departure. On his shoulders rested a burden such as few naval commanders had ever borne. This multi-carrier task force could succeed in its mission only by achieving complete surprise—and Nagumo could never rid himself of the haunting spectre of being under constant surveillance by U.S. submarines. Moreover, he worried constantly that he might fail to receive the message that diplomatic negotiations were successful and Tokyo decided to call off the attack.

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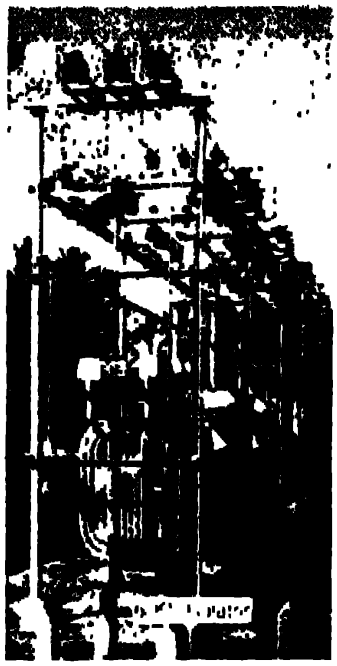
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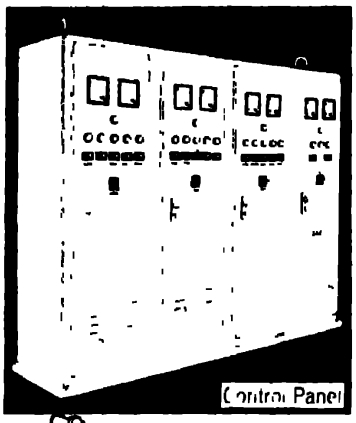
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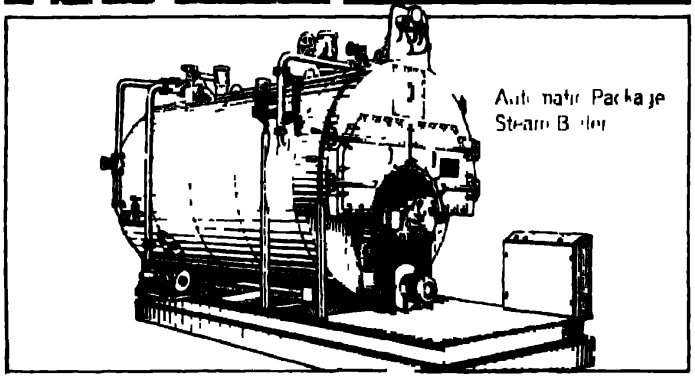
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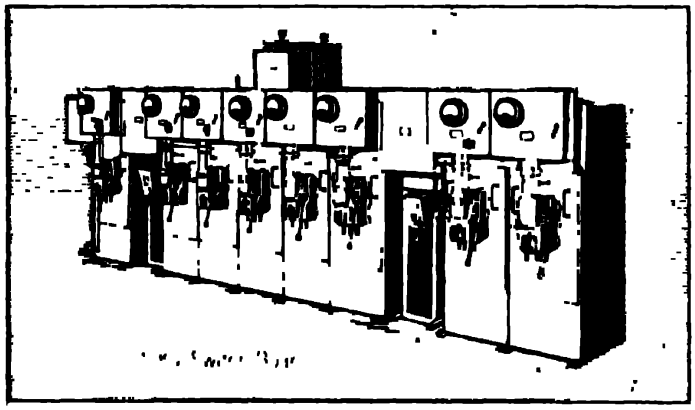




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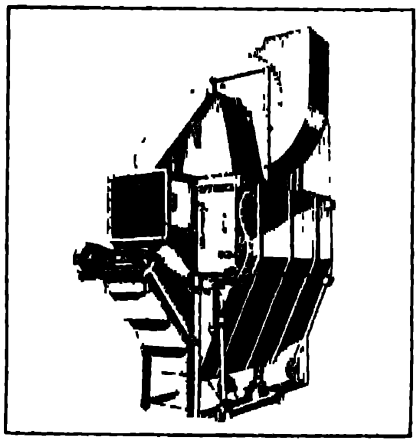
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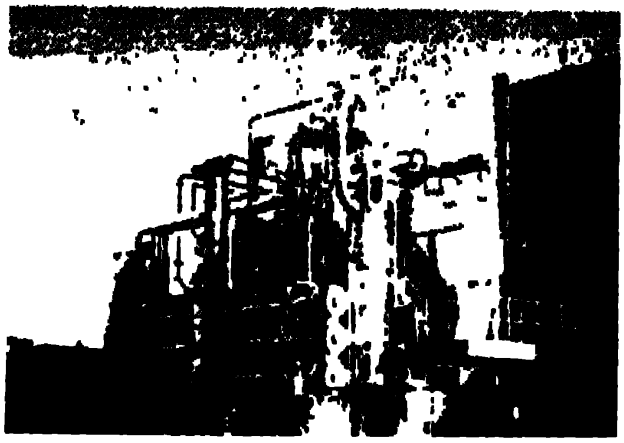
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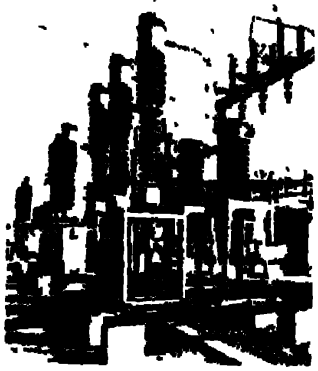
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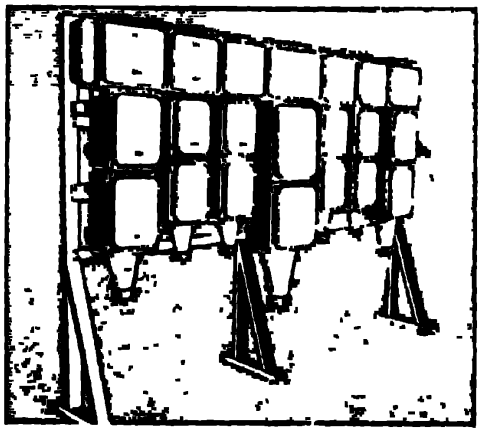


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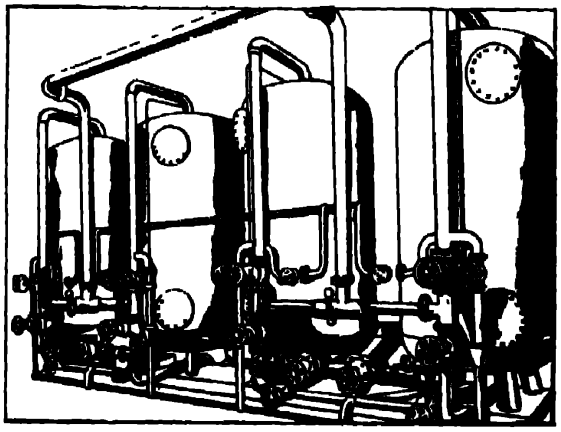


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Neither the commander's anxiety nor the atmosphere of constantly building tension affected the devil-may-care spirit of the pilots and air crews. Accustomed to the daily risks of a hazardous profession, and fortified by a near-fanatical loyalty to Emperor and nation, they relaxed easily at night over *saké* and such popular games as *go* and *shogi*, and by day they continued their training programme with unflagging zeal. The torpedo and bomber pilots, particularly, studied scale miniatures of Oahu and Ford islands until they knew every feature and contour of shoreline, and pored over models of U.S. warships until they could instantly identify them.

Aboard *Soryu*, a petty officer, Noboru Kanai, reputed to be the best bomb-aimer in the Japanese Navy, excited general admiration by his dedication to the task at hand. He wore his flying jacket at all times, and every day, morning and afternoon, he boarded his plane in the hangar and repeatedly ran through his bombing procedures. Apparently his persistence obtained results, for he was later credited with a direct hit on *Arizona* during the actual attack.

While the First Air Fleet, its very existence unsuspected, was bearing down relentlessly upon its prey from the north, what eyes were focused on the Pacific were focused on the south. For Japanese ships and convoys were already in open movement there, and the American Press obligingly speculated on what areas were being threatened. "Roosevelt Sees Tokyo Envoys as Japanese Mass in Indo-China," the New York *Times* reported on November 28, 1941. "It May Be a Thailand Drive."

Another deceptive manoeuvre was the departure of *Tatuta Maru* from Yokohama on December 2.



En route to Pearl Harbour the Japanese fleet steamed 3,500 miles across the Pacific undetected. Shown here, left to right, the battleships "Hiei" and "Kirishima," and the carrier "Shokaku"

This was the third of the three passenger runs Japan had been permitted to send to the United States, and *Tatuta Maru's* purported mission of "exchanging American evacuees from the Orient for Japanese nationals in the United States"

was plausible and widely publicized in American newspapers. The vessel was scheduled to reach the United States on December 14, and on December 3 a New York *Times* dispatch from Tokyo took this "as a token that so far as Japan was concerned nothing was likely to happen for some time."

The deception was obvious when on which *Tatuta Maru* began her deceptive voyage), and the message said, "Climb Mount Niitaka." This was the code phrase announcing that negotiations had failed and war was now certain. For the first time the date of attack was given: December 7.

The fleet had just passed through the dangerous waters north of the



after December 7 *Tatuta Maru* reversed her course and returned to Japan.

"Enjoy Your Dream of Peace!"

ON THE task force's seventh day at sea, radio instructions from Japan resolved at least one of Nagumo's anxieties. The date was December 1 east of the international date line (December 2 in Japan, the same day U.S. base at Midway. Tension had run high, for in this area the possibility of being discovered by a stray U.S. ship or plane was considered great. Miraculously, the fleet had escaped detection, and it was with relief and subdued elation that all hands now prepared for combat. Meanwhile, Ambassador Nomura and special envoy Saburo Kurusu were instructed to keep peace

conversations alive in Washington, and their negotiations, conducted in a spotlight of publicity, were tc engage America's breathless attention for the next few days.

On December 6, every ship in the task force was fuelled to capacity, and the tankers (except for three already sent home) were dispatched to a post-attack rendezvous. Shortly after midday, all crews were summoned on deck. There the Emperor's war decree was read, followed by this message from Yamamoto:

"The fate of the empire hangs on this one battle. Let every man do his best."

The ships then turned to a bearing of 180 degrees—due south—and began the final high-speed run to the point from which the planes would be launched.

The task force was now little more than 500 miles from its target. Since discovery here at the very doorstep of the enemy fortress would certainly mean disaster, the next few hours were marked by agonizing strain. But again fortune favoured the bold.

No American patrols were encountered, and the coming of darkness greatly lessened the tension. For the remaining hours, Japan's onrushing armada would be cloaked in the concealing blackness of night.

Shortly before midnight, Tokyo relayed a report from Hawaii that Genda and Fuchida had eagerly awaited. No barrage balloons were yet emplaced to hamper the pilots on their bombing runs (although such balloons had recently been shipped out). Nor was there any evidence that torpedo nets were protecting the battleships.

This was good news indeed, for the Japanese had been much concerned about penetrating these tough steel nets.

One last message from Tokyo in the hours before the attack reported that none of the U.S. carriers was in Pearl Harbour, that nine battleships were anchored there, plus seven cruisers and 19 destroyers. There was also a report on weather conditions around Oahu, but this was unnecessary: the Americans themselves were obligingly broadcasting this information every hour.

In Japan, all eyes of the naval hierarchy were now riveted on Pearl Harbour.

"Hawaii, you will be caught like a rat in a trap," Admiral Matome Ugaki, Yamamoto's chief of staff, confided to his diary "Enjoy your dream of peace just one more day."

Then, unable to repress his emotion, he added, "What a tremendous thing it is to gamble thus the fate of a nation!"

In the blackness of the dawn of December 7, Admiral Nagumo was glad to shift the responsibility for this gamble. "I have brought the task force successfully to the point of attack," he told Genda. "From now on the burden is on your

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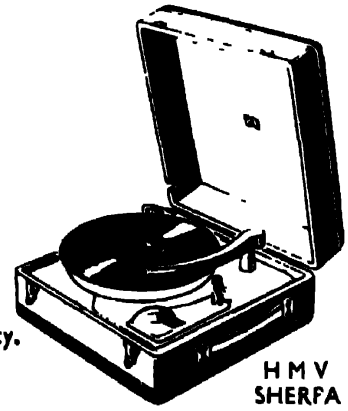
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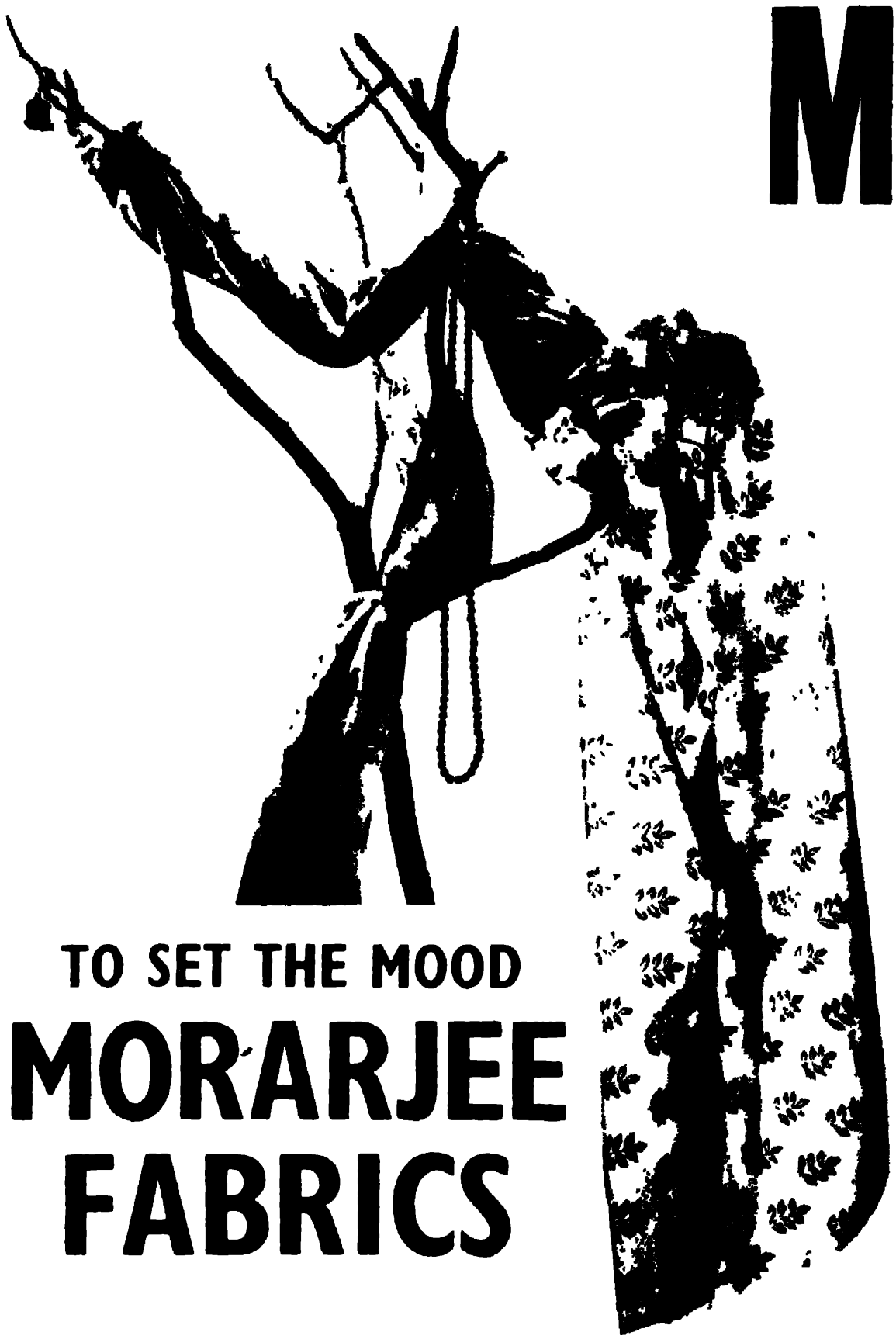
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shoulders." With these words the old order changed, and the new age of aviation took over.

"Tora, Tora, Tora!"

At 5.30 the two long-range seaplanes first sent ahead as scouts were catapulted from the decks of the heavy cruisers *Chikuma* and *Tone*. These sinister doves were to fly over Oahu and Lahaina Anchorage off the island of Maui for a last-minute check on the U.S. fleet. If they were discovered, it would certainly alert the enemy.

But this was a calculated risk, balanced against the urgent need for sure information.

The pilots on all the Japanese carriers had been roused shortly before 3 a.m. Many were too keyed up for sleep, in any case, having spent much of the night writing farewell letters home or making valedictory entries in their diaries. As soon as they had finished breakfast, they collected in the briefing room of each carrier for a final inspirational pep talk.

On *Hiryu*, torpedo pilot Lieutenant Heite Matsumura brought a welcome note of humour to the grim and serious atmosphere. In Japan, people often wear a *masuku*—something like a surgeon's cotton mask—over the mouth and nose in winter to guard against cold germs.

Matsumura had worn a *masuku* all the way from Hitokappu Bay, pushing his food underneath it rather than take it off even at mealtime. He said he didn't want to catch a cold at the eleventh hour and miss the attack.

On the morning of the briefing, Matsumura appeared without his mask but with a prominent black moustache he had been sprouting in secret. Young officers in the Japanese Navy are almost invariably clean-shaven, and Matsumura's new adornment evoked many gibes. "You looked better with the mask on," his plane crew jeered.

At 5.30 the six carriers, now some 200 miles north of Oahu, turned almost due east and, to compensate for a brisk headwind during the launching, increased their speed to 24 knots.

The sea was very rough, the great ships pitched violently, and at times fine spray washed high over the flight decks. But take off, though difficult, was still possible, and on each carrier the combat pennant was raised.

Emotion-swept deck crews readied the runways to signal off the first attack wave of Japan's "wild eagles."

As the plane crews prepared to enter their aircraft, each man tied a *hachimaki* round his leather helmet. This is a long, narrow kerchief which the samurai of old traditionally bound about their heads before entering battle. On each *hachimaki* that the airmen now wore was written the word *Hissho*—Certain Victory.

The entire launching operation

was executed smoothly and swiftly. The first wave included 43 fighters, 49 high-level bombers, 51 dive bombers and 40 torpedo planes. Within 15 minutes from the moment the first aircraft left its mother ship, all 183 planes were in the air. It was the fastest launching on record. In practice runs at Kyushu, under good weather conditions, the average take-off time had been 40 minutes. By the time the task force departed for Hitokappu Bay, the interval had been reduced to 20 minutes. Now, at Oahu, even this was cut—and there were only two casualties. One high-level bomber developed engine trouble, and one fighter plunged from the *Hiryu* into the sea and was lost.

At Fuchida's signal, made by taking his own group of horizontal bombers in single file across *Akagi's* bow, the planes assumed flight formation and set their course for Oahu and Pearl Harbour. Behind them would come a second wave as soon as the crews could raise the remaining planes up to the flight deck. In all, there would be 353 aircraft in the attack, the largest concentration of naval air power in the history of warfare up to that time.

The rising sun of Imperial Japan had never vaulted so high into the heavens, and all were aware of it. On deck the cheering crews, some men with tears running down their faces, continued to wave their caps in farewell until the speeding planes shrank to pinpoints. On the bridge, Genda, too, felt a tremendous surge of pride. With a hundred hoarse *"Banzais"* still echoing in his ears, he went to *Akagi's* control room to await Fuchida's initial message, which would be sent when he reached the target.

Spread across the Pacific, the commanders of the Second, Third, Fourth and Fifth Japanese Fleets also awaited this message, for it would send them crashing into battle on a dozen fronts. And in the distant homeland Yamamoto waited, too, while in Tokyo key members of the Naval General Staff had gathered in grim apprehension.

The earliest information came when one of the two scout planes reported its findings to the attackers. The U.S. ships were still in Pearl Harbour, and there was no evidence of an alert.

At exactly 7.49 the air waves crackled with Fuchida's electric message, sent from Hawaiian skies. *"To-To-To!"*

It was the first syllable of the Japanese word for "Charge," and it meant that the first wave was now attacking. But it told nothing about the circumstances of that attack.

A few minutes later, there was another message. To his anxious superiors on *Akagi* and in Tokyo, Fuchida radioed a reassuring, *"Tora, Tora, Tora!"* (Tiger, Tiger, Tiger!)

It was the pre-arranged code word for conveying the news that complete surprise had been achieved.

(To be concluded next month)

Have you ever taught your child

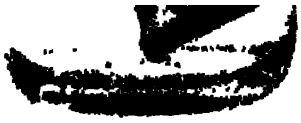


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Reader's Digest



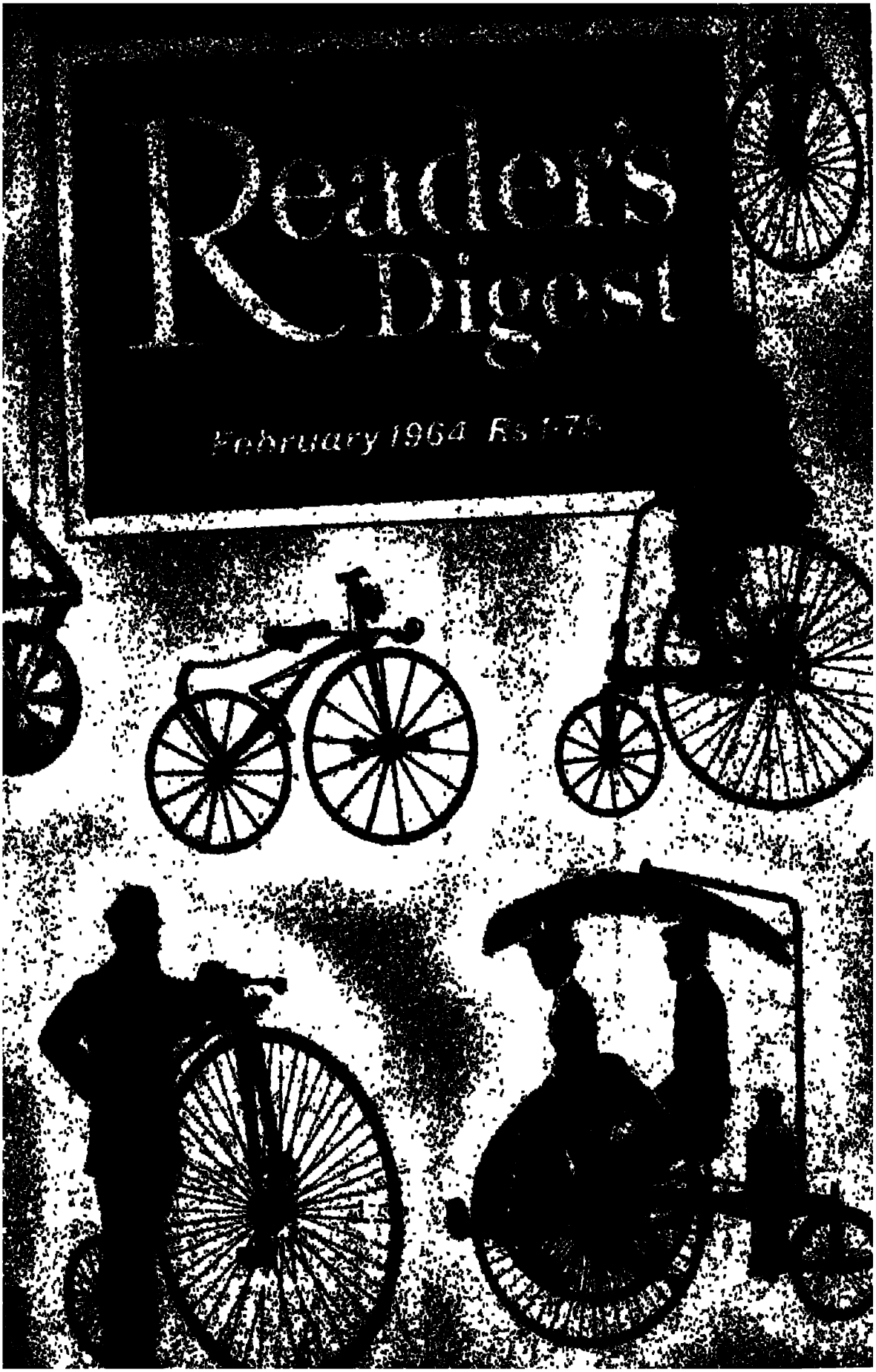
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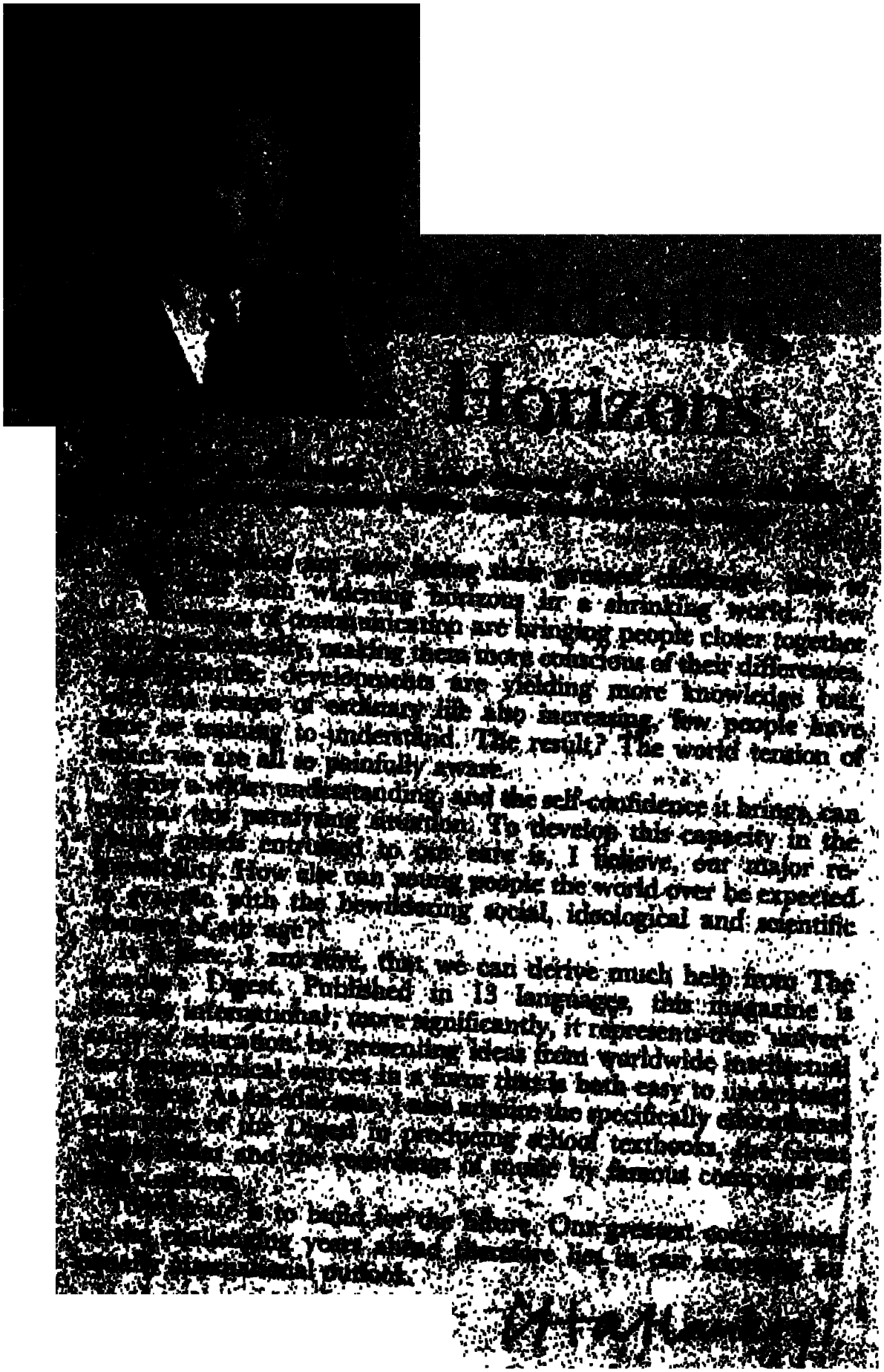
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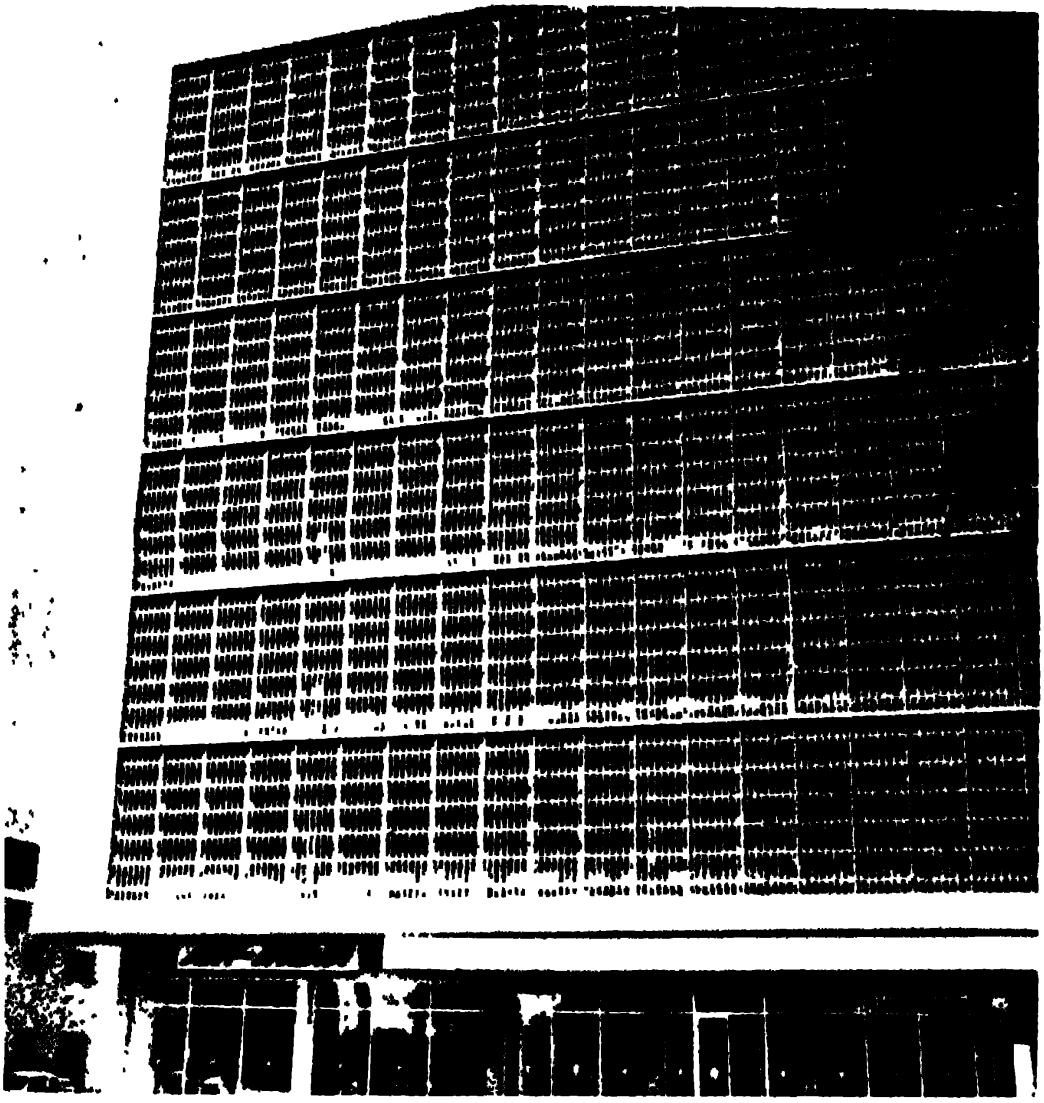
It Pays to Increase Your Word Power, 7

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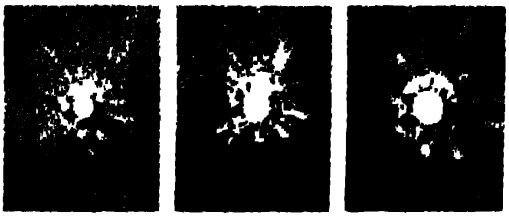
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It Pays to Increase Your Word Power

By Wilfred Funk

Ernest Hemingway avoided using "expensive" words. "There are older, better words," he said. In this list of time-tested one-syllable words, tick the word or phrase you believe is ***nearest in meaning*** to the key word. Answers are on page 12.

---

(1) **lurk**—A: to roll to one side. B: lie hidden. C: attract. D: quiet.

(2) **plumb**—A: to fall. B: weigh. C: hit. D: get to the bottom of.

(3) **throe**—A: extreme pain. B: prostration. C: gripe. D: jaw.

(4) **vaunt**—A: to jump. B: boast of. C: conquer. D: envy.

(5) **glut**—A: to glue together. B: be lascivious. C: disembowel. D: fill to excess.

(6) **goad**—A: to flog. B: build. C: incite or spur. D: dig into.

(7) **brink**—A: very edge. B: top. C: sharp point. D: height.

(8) **glib**—A: swift. B: smooth-tongued. C: gay. D: silent.

(9) **foist**—A: to force. B: lift. C: palm off. D: strengthen.

(10) **prate**—A: to argue. B: brag. C: parade up and down. D: talk foolishly.

(11) **moot**—A: gloomy. B: ugly. C: debatable. D: spiritless.

(12) **bruit**—A: to boil. B: spread a rumour. C: ponder. D: injure.

(13) **smug**—A: unpleasant. B: stubborn. C: self-satisfied. D: cosy.

(14) **flounce**—A: to flirt. B: swagger. C: dance. D: fling oneself about impatiently.

(15) **font**—A: source. B: wisdom. C: folly. D: pulpit.

(16) **foil**—A: to grow angry. B: hinder or prevent. C: deceive. D: quarrel bitterly.

(17) **quell**—A: to humiliate. B: act quickly. C: suppress by force. D: hesitate.

(18) **curt**—A: dignified. B: clever. C: prompt. D: abrupt.

(19) **loath**—A: reluctant. B: lazy. C. proud. D: slow.

(20) **plight**—A: quick retreat. B: test. C. distressed condition. D: fear.

(*Now turn to page* 12)



planned development

Over eighty per cent of the schemes in the Third Five Year Plan are an essential part of defence and the rest of the Plan is also indirectly concerned with it.

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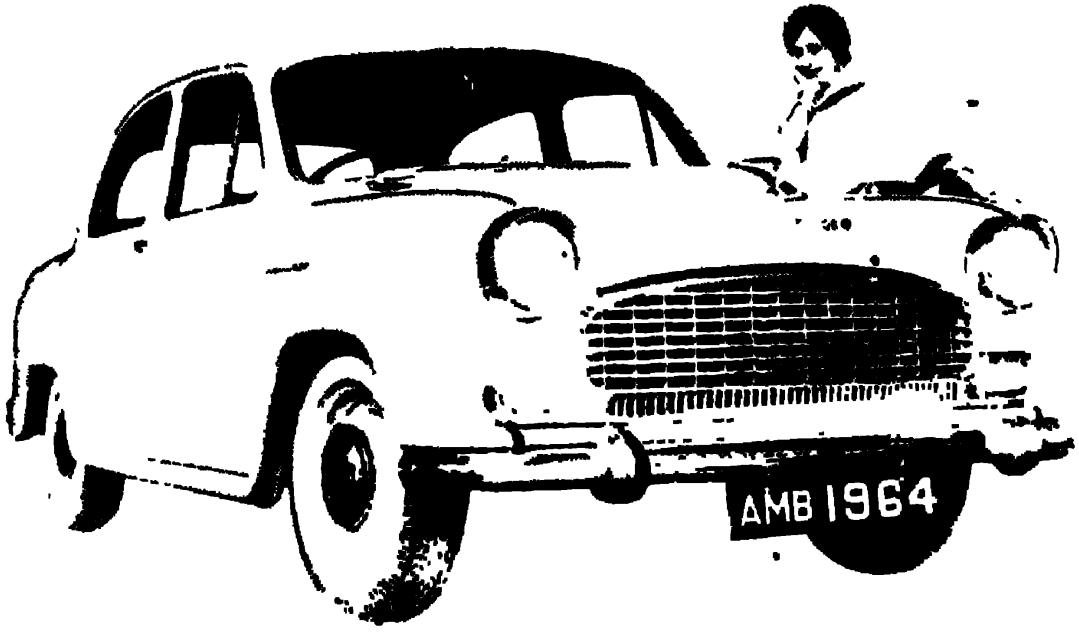
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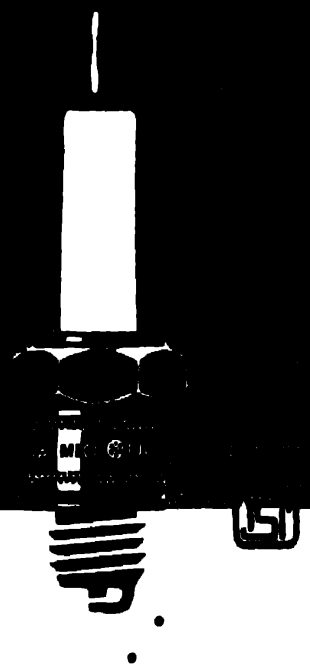
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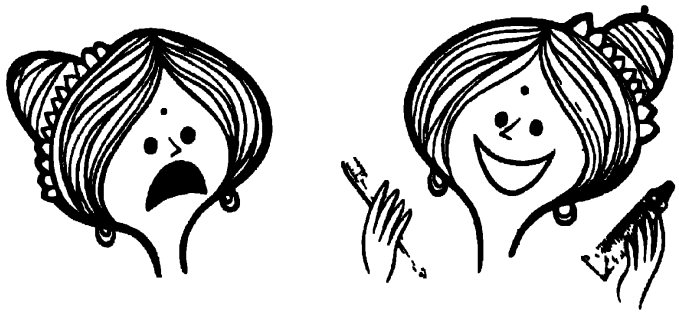
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IT PAYS TO INCREASE YOUR WORD POWER

Answers to the quiz on page 7

(1) **lurk**—B: To lie hidden, as in ambush; stay in a place secretly or furtively; as, to *lurk* in dark alleys. Middle English *lurken.*

(2) **plumb**—D: To ascertain depth with a *plumb* line. Hence, to get to the bottom of; fathom; as, to *plumb* a mystery. Latin *plumbum*, "lead."

(3) **throe**—A: Extreme pain; anguish; agony; as, a nation in the *throes* of economic ruin. Old English *thrēa*, "pang, threat"

(4) **vaunt**—B: To boast of; brag of; as, to *vaunt* one's success in public. Latin *vanus*, "empty."

(5) **glut**—D: To fill to excess; satiate; oversupply; as, to *glut* the market. Latin *glutire*, "to swallow."

(6) **goad**—C To incite or spur; prod; prick with a sharp stick, as, to *goad* into action. Old English *gād*, "spear, point, arrow."

(7) **brink**—A: The very edge, as of a steep place; verge; as, on the *brink* of failure. Middle English *brinke.*

(8) **glib**—B. Smooth-tongued, speaking flippantly, often with intent to deceive, as, a *glib* auctioneer. Low German *glibberig*, "slippery."

(9) **foist**—C: To palm off; pass off (something spurious) as genuine; as, to *foist* a worthless stock on an investor. Dutch *vuisten*, "to take in one's hand" (*i e*, to palm, as dice), from *vuist*, "fist."

(10) **prate**—D: To talk foolishly and at length; chatter; babble; prattle, as, to *prate* about family affairs. Middle English *praten.*

(11) **moot**—C: Debatable; disputable; as, a *moot* question. In Anglo-Saxon days a town "*moot*" was a town meeting for purposes of debate and discussion.

(12) **bruit**—B: To spread or publish a rumour; as, to *bruit* a scandal abroad. French *bruire*, "to roar."

(13) **smug**—C: Self-satisfied; complacent; as, a *smug* expression. Low German *smuk*, "neat, trim."

(14) **flounce**—D: To fling oneself about impatiently or petulantly; as, to *flounce* out of the room. Akin to Norwegian *flunsa*, "to hurry."

(15) **font**—A: Source; as, a *font* of wisdom. Latin *fons*, "fountain, spring."

(16) **foil**—B: To hinder or prevent; frustrate; baffle; as, to *foil* the enemy's plans. Old French *fouler*, "to trample."

(17) **quell**—C: To suppress by force; as, to *quell* a rebellion. Old English *cwellan*, "to kill."

(18) **curt**—D: Abrupt; brusque; short and sharp in manner; as, a *curt* answer. Latin *curtus*, "shortened."

(19) **loath**—A: Reluctant; averse; strongly disinclined, as, *loath* to leave home. Old English *lāth*, "hateful."

(20) **plight**—C: Distressed condition; predicament; as, the *plight* of the unemployed. Middle English *plit.*

Vocabulary Ratings

20—19 correct ..... excellent
18—16 correct ..... good
15—13 correct ..... fair

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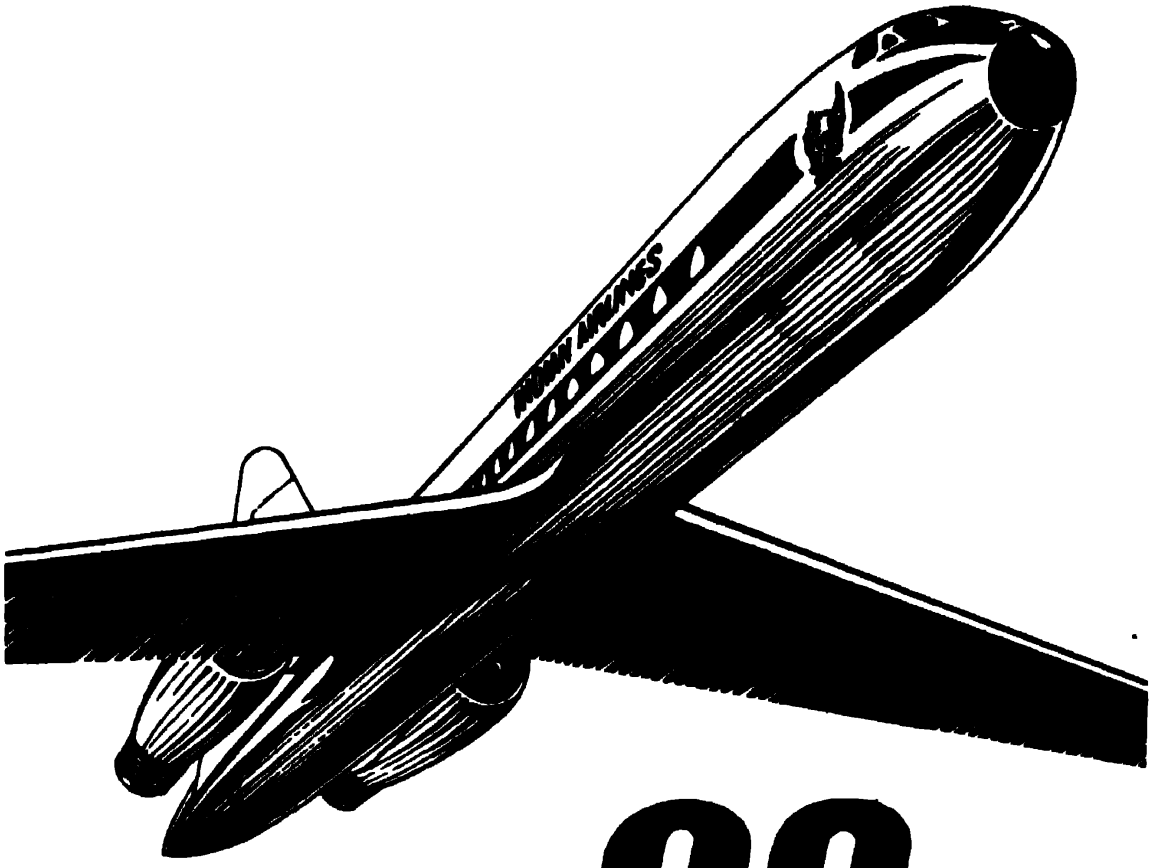
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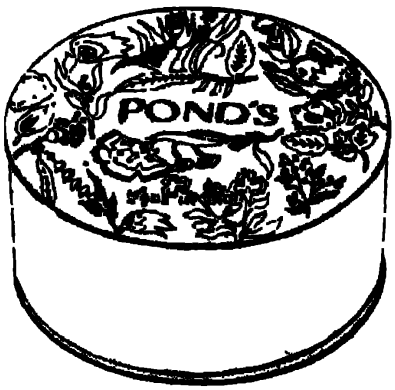
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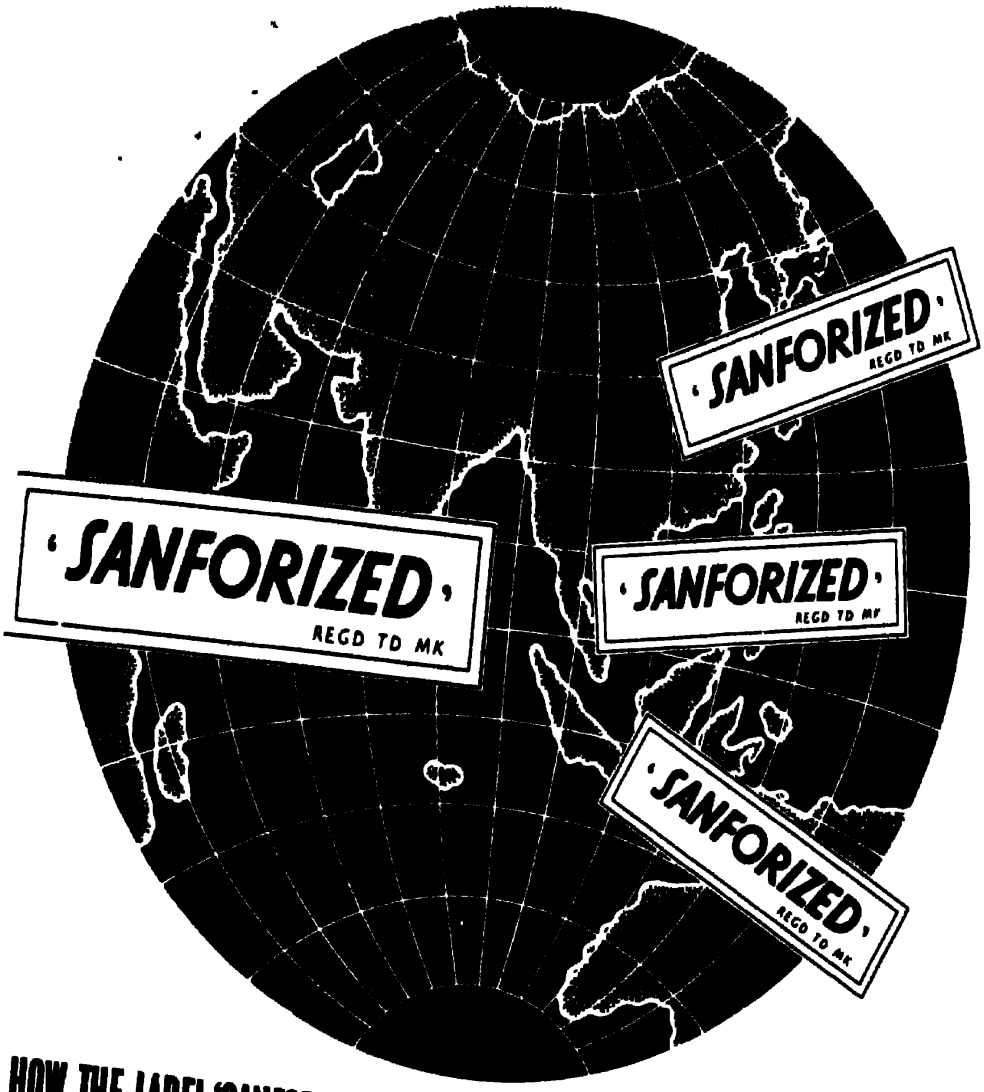


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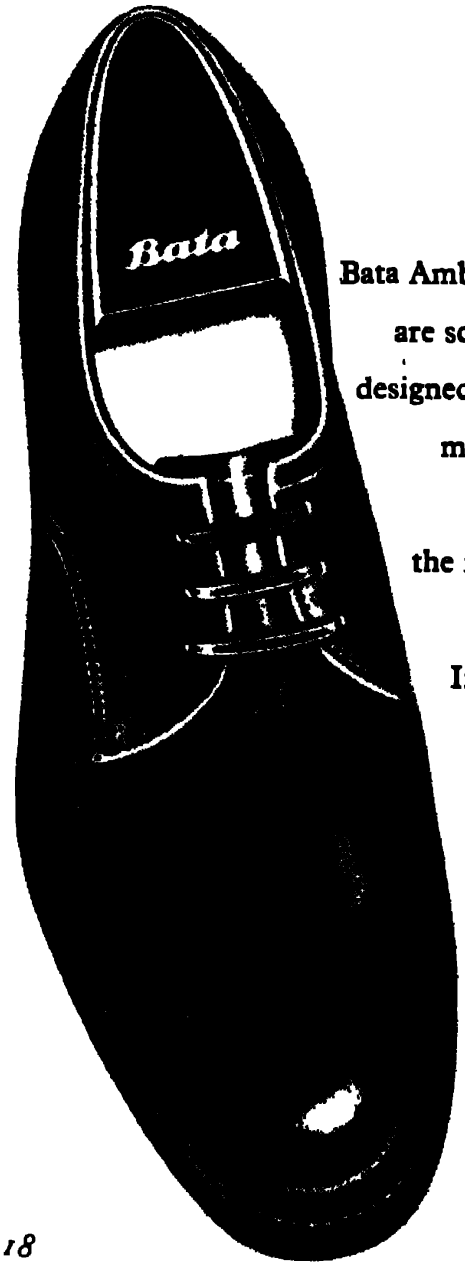
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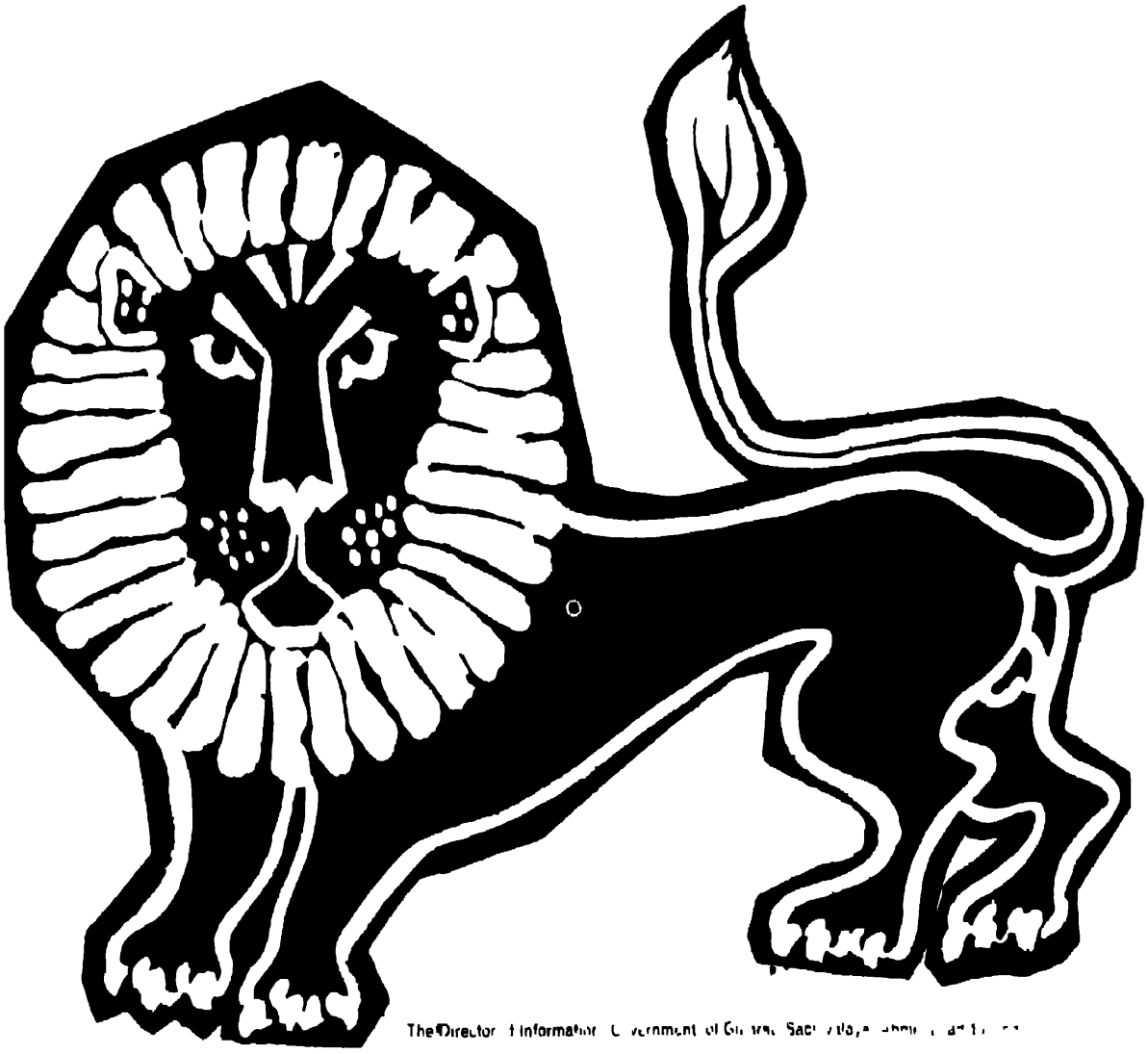


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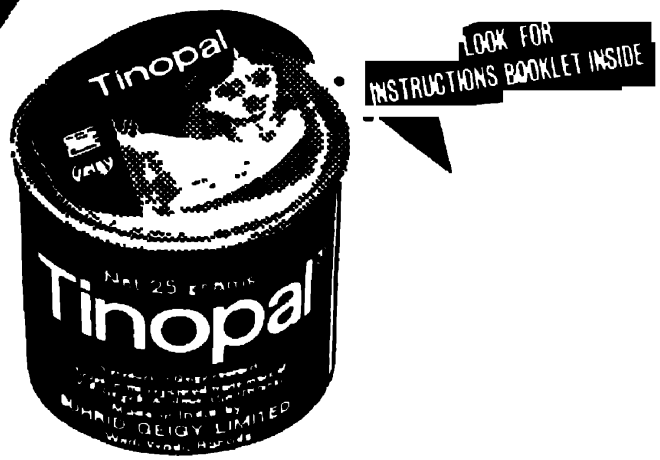
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A Portrait of President Lyndon Johnson

An intimate study of the proud, complex, hard-driving President of the United States—by one of Washington's most perceptive political commentators

By Stewart Alsop

LONG BEFORE John Kennedy formally announced his presidential candidacy, he sat over a luncheon steak one day and dispassionately discussed his rivals for the office.

"I know all the other candidates pretty well," he said, "and I frankly think I'm as able to handle the Presidency as any of them, or abler—all except Lyndon, and he hasn't got a chance."

John Kennedy was a shrewd judge of men, and the remark suggests how highly he rated the abilities of the man who has now succeeded him in the Presidency. Lyndon Baines Johnson is an extraordinarily complicated and remarkably fascinating human being. He is proud, excessively vain and oddly humble. He is as tough as a whole barrel of nails, yet sentimental to the point of corniness. He is long-headed, shrewd—even foxy—and yet in some respects surprisingly

naive. He is a hardened, time-battered politician who is still in part a boy.

To see the real Johnson, it is necessary to leapfrog back over his three unhappy years in the Vice-Presidency—unhappy because the office is powerless—to the time when, as majority leader of the Senate, Lyndon Johnson was the second most powerful man in America. (To say that Johnson loves power is no affront to the man. Kennedy loved power, too. At that same lunch at which he paid his casual compliment to his successor, Kennedy remarked that he wanted to be President "because that's where the real power is.")

As soon as Johnson won that Senate post in 1955, he reached out with a sure instinct for the chief levers of party power: the Policy Committee, the Steering Committee, the Democratic Campaign Committee and the party secretariat. He was chairman of the first two, and thus controlled both broad policy decisions and the vital committee assignments. He had a majority of Johnson men on the Democratic Campaign Committee, and thus controlled campaign largess. And the whole party secretariat was devoutly loyal to Lyndon Johnson and to nobody else.

The executive branch is, of course, wholly different from the legislative branch, and it is even more difficult to control than the Senate. But anyone who saw Lyndon Johnson operating as majority leader will be dead certain of one thing: Johnson will dominate absolutely his branch of the government. He will be master in his own house, for good or ill.

This prediction leaves unanswered other vital questions. For example, where does Johnson really stand in the political spectrum between left and right? And, what kind of human being is this man who now holds history in the hollow of his hand?

Johnson went to Congress in 1937 as that rare bird in Texas, an all-out supporter of the New Deal. As a result, he was a special favourite of President Franklin Roosevelt. ("He was like a daddy to me," Johnson says.) Since those New Deal days, most students of the Johnson career believe, Johnson has moved rather steadily to the right. In a long interview I once had with him, Johnson explained his position in typical Johnsonese: "One thing you learn by experience is that politics is about people—the greatest good for the greatest number. I've always thought I had a social conscience. I know one thing—you don't want to sit on your hands, you have to keep moving forward. If something has to be done, the Republicans always have reasons why you can't do it now."

This is hardly a detailed blueprint of Johnson's political ideology; but it does sum up certain Johnsonian

attitudes. As his dig at the Republicans suggests, Johnson is both a dedicated Democrat and an activist, a man who believes in a strong federal government to keep the country "moving forward." By and large, his "social conscience" kept him voting along liberal Democratic lines in his years on Capitol Hill.

But Johnson is also a Southerner. Indeed, the geographical "accident" of his birth is in some ways the most important political fact about him. The chances are high that it would have prevented him from ever becoming President, had it not been for another accident—the accident of the assassin's bullet. Now that he is President, there is a deeply important question to ask about him: How will he, a Southerner, deal with the continuing crisis caused by the Negro revolt?

To guess at the answer to that question, it is necessary first to understand the kind of Southerner Johnson is. To that end, it is revealing to see him on his native heath, at the LBJ Ranch outside Johnson City, in South Central Texas. Located in rocky, rolling, semi-arid country, the ranch house is a rambling, mostly wooden, building, a "Western" ranch house of the kind that rich cattlemen built for themselves around the turn of the century. The fact is that Johnson City, which was founded by Lyndon Johnson's grandfather, is not really a southern town at all. It is really



President Lyndon Johnson

part of the West, the West of cowboys and cattle. There has never been any considerable number of Negroes there, and the southern attitude on the racial issue is not bred in Johnson's bones.

As Vice-President, Johnson took a consistently pro-civil-rights position. This was no doubt partly for political reasons. Johnson intended to make a hard try for the nomination in 1968, and he was quite aware that the liberal intellectuals and the pro-civil-rights groups generally exercise great power at Democratic conventions. And they would certainly try to veto any Southerner with southern views on the racial issue. But it is always a mistake to be too cynical about the motivations of a politician, especially if that politician is, as Johnson is today, a President who wants desperately to go down in history as a great President.

Johnson's favourite quotation is from Isaiah: "Come now, let us

reason together"; and bridging seemingly unbridgeable chasms between seemingly irreconcilable viewpoints was his specialty as majority leader. Johnson is not going to "solve" the racial problem, because there is no "solution" to the problem. But he has a better opportunity to contain the racial crisis, to find for the nation a way of living with the insoluble, than his brilliant predecessor had.

In other respects, Johnson will no doubt simply keep to the Kennedy line in the months that remain before the election. The real difference between Johnson's Washington and Kennedy's Washington is likely to be more one of style than of ideology. Kennedy's Washington had an elegance and an intellectual quality Johnson's Washington will lack. But Johnson's Washington is likely to have other qualities.

Again, the LBJ Ranch is the key to an understanding of the very special Johnson style. The Johnson style derives in part from the forts, and in part from the swimming pool.

Lyndon Johnson loves to show the forts to visitors. There are two of them, small, shaped like beehives, with a double thickness of stone, and thin slits for rifle fire. They were built about 100 years ago by Samuel Ealy Johnson, the President's grandfather, to protect the settlers of Johnson City from Red Indian raids. Johnson likes to tell how his grandmother saved her life during an Indian raid by hiding in a flour barrel.

The closeness of this frontier background explains a lot about Lyndon Johnson. He is an elegant dresser, goes in for long, full, single-breasted jackets. But beneath this elegant exterior he can be very rough and rude when provoked. The real mark of the frontiersman in him is the restless hopefulness of the man, the undefeated quality.

The swimming pool is also part of the Johnson style. It is large, luxurious and permanently heated, so that Johnson and the endless stream of visitors to the ranch can take a dip even in winter. It is equipped with numerous telephone outlets, so that Johnson, a compulsive user of the telephone, can make calls even when immersed. Piped-in music soothes the nerves of the bathers, who usually include two or three decorative young ladies. Behind the pool is a garage with space for 11 vehicles.

The pool, in short, is modern Texas, oil Texas, millionaire Texas. This Texas society in which Johnson has lived and breathed and had his being is a vigorous, hard-driving society, in which success is the purpose of life, and money is its measure. This environment is as much a part of Johnson as the frontier. Johnson may well offend his fellow Texans by his stand on civil rights. He is unlikely to offend them, however, by his position on the oil-depletion allowance.

In fact, the people Johnson is most likely to offend are the liberal intellectuals; they have never taken to him, even though he has more often than not supported the liberal line. The basic reason for their dislike is, again, a matter of style. Johnson is an intelligent man, but unlike President Kennedy he is in no sense an intellectual. The difference between Kennedy's intellectual background and Johnson's is the difference between Harvard and Southwest Texas State Teachers College, which is Johnson's Alma Mater. Academic and intellectual types usually feel uncomfortable with Johnson, and he with them.

In terms of style, in fact, Lyndon Johnson has more in common with another non-intellectual President, Harry Truman, than with his immediate predecessor. Like Truman, Johnson has a homely turn of phrase, and a tendency to see complex matters in simple, basic, human terms. Here, for example, is Johnson on the subject of foreign policy:

"The real danger is that the other side is going to underestimate us—it's happened before. The danger is they'll think we're fat and 50 and fighting among ourselves about free enterprise and socialism and all that. We might mislead them, so that they'll think these Americans are just the country-club crowd. That's a mistake our enemies have made before.

"I remember at school in Johnson City, there was a school bully, like there is in every school. There was one boy he used to pick on all the time; he'd follow him home from school, slapping and kicking him, sometimes right up to his front porch.

"This boy's mother had told him it was a bad thing to fight, and we all thought he was a sort of mother's boy. But one day he decided he'd had enough. He turned on the bully, and he got him down, and he began to hit his head on the concrete till his brains almost spilt out. That bully was very different after that. But the chances are he'd never have bullied this quiet boy in the first place if he'd known what was going to happen."

As President, Lyndon Johnson certainly will not permit the United States to be bullied. Ever since his political "daddy," Franklin Roosevelt, found a place for him on the Naval Affairs Committee as a new Congressman in 1937, defence has been a Johnson speciality, and he has consistently favoured a strong defence. And although one of the most effective arguments against his presidential candidacy in 1960 was that he was essentially a "parochial politician," in Walter Lippmann's phrase, he has been taking a sort of foreign-policy cram course in the last three years. He has made several trips abroad, and as a member of the National Security Council he participated in all the major foreign-policy decisions, including

the 1962 decision to face down Khrushchev in Cuba.

It will be interesting to see the personal style of Lyndon Johnson, as President, applied to foreign policy. A meeting between President Johnson and Chairman Khrushchev, for example, would be a peculiarly fascinating occasion, particularly if Johnson administered what was known in his Senate days as "Lyndon's Treatment A."

Treatment A was the majority leader's secret weapon for use against recalcitrant Senators. He also used it, on occasion, on reporters, including this one. I had written a couple of sentences critical of Johnson in a newspaper article; I later described what happened in his office:

"The majority leader was, it seemed, in a relaxed, friendly, reminiscent mood. But by gradual stages this gave way to something rather like a human hurricane. Johnson strode about his office, talking without pause, occasionally leaning over, his nose almost touching the reporter's, to shake the reporter's shoulder or grab his knee. Secretaries were rung for. Memoranda appeared and then more memoranda, as well as letters, newspaper articles and unidentifiable scraps of paper, which were proffered in quick succession and then snatched away. Appeals were made, to the Almighty, to the shades of the departed great, to the reporter's finer instincts and better nature, while the reporter, unable to get a word in edgeways, sat collapsed upon a leather sofa, eyes glazed,

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AT THE height of his power as majority leader of the U S Senate, Lyndon Johnson talked at length with Stewart Alsop, Washington editor of *The Saturday Evening Post* and author of the adjoining article The following extracts from that interview provide a remarkable insight into the thinking of the 36th President of the United States

Q—Some say you're a mixture of your mother's family, mostly teachers and ministers, and your father's family, frontiersmen, politicians and men of action Is that accurate?

LBJ—Well, there's some of that But my daddy was a teacher

Q—What was he like?

LBJ—He looked like me, only he was better looking He was a warm man, he loved people, while my mother was sort of aloof Mother's people were Baptists, mostly, teachers and preachers She took after them She was a writer, she wrote a lot for the papers, and I suppose I took after her— I was editor of the college paper Mother taught speech, and so did I

Q—Weren't you a debater?

LBJ—Yes, sir, we won 65 or 66 debates, only lost the last one. We won the city and the county championship, but we lost the state [championship], by a vote of the judges of 3–2 I was so disappointed I went right into the bathroom and was sick

Q—Your mother has written that there was a time after you graduated from high school, a time of indecision I think she calls it, when she was unhappy about you

LBJ—Yes, I went out to California in 1924

mouth half open. Treatment A ended a full two hours later, when the majority leader, a friendly arm around the shoulder of the dazed journalist, ushered him into the outer office."

As Treatment A demonstrates, the new President is an extraordinary man, in the literal meaning of that word. His drive is extraordinary. Every politician who gets to the top of the political heap has great dynamism, but at least in the past there was something almost phrenetic about Johnson's drive to power. ("I'm always pressed for time," he has said. "An hour late and a dollar short, that's the way I've been all my life.") Ever since boyhood he has been driven by a need to succeed. "My daddy used to wake me up at dawn," he has said, "and shake my leg and say, 'Lyndon, every boy in town's got an hour's head start on you.' "

Johnson has been trying to catch up ever since. The pressure to catch up certainly helped cause the massive heart attack—"as bad as you can have and live," by his own account—which he suffered in 1955. Ever since the heart attack, from which he has staged a complete recovery, he has been trying to slow down. The effort is sometimes visible: Johnson will suddenly halt the flood of his talk, lie back in his chair, gaze contemplatively at the ceiling and scratch his stomach. But these moments of conscious relaxation rarely last long, and he is soon striding restlessly about again, the floodgates of his conversation opened wide.

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and lived sort of from hand to mouth, washing cars, doing odd jobs Then I came back home, and for a while I worked on the road gang. But my mother was always after me to get an education, and finally I said I would go to college I had to do six weeks' high-school work to get ready for the college entrance exam—and I made all A's in the end, except for plane geometry. Then I went through college in less than three years In college I never let daylight catch me in bed I had about five different jobs, janitoring, working for the president, selling silk socks, and so on, and when I graduated I had 200 dollars in the bank.

Q—What does your extraordinary drive come from?

LBJ—Well, I suppose you'd call it pride. Some people have it in an unusual degree For me there has been more satisfaction in politics than in anything else. I've always wished Lady Bird and I had a son; if we had a boy, I'd want him to be a politician, or a teacher or a preacher Or maybe a writer or a publisher. But someone who deals with other people, who has an influence on the course of events I get more satisfaction out of doing things for people than anything else

Q—The liberals say you're too conservative, and the conservatives say you're too liberal. How would you define your political position?

LBJ—Well, I like to think I'm a liberal without being a radical. To put it another way, I always want to keep moving—but not with both feet off the ground at the same time

There are other ways in which Johnson is extraordinary. He is extraordinarily proud. Sometimes his pride can degenerate into mere vanity, as evidenced by the endless proliferation of his initials, which are attached to his charming wife, Lady Bird Johnson, his two daughters (Lynda Bird, 19 and Lucy Baines, 16) and his ranch. But in its essence Lyndon Johnson's pride is admirable, a pride in achievement, a love of excellence.

Johnson is also an extraordinarily likeable man. Senator Earle Clements of Kentucky was not greatly exaggerating when, after Johnson's heart attack, he paid this tribute to him: "I doubt if there is a member of the Senate, on either side of the aisle, who does not look on Johnson as a friend."

Finally, as John Kennedy's casual remark suggests, Lyndon Johnson is a man of extraordinary ability. When he was majority leader, there was something magical about his performance; no one was ever quite able to explain how he worked his legislative miracles. A devoutly loyal staff and a good intelligence system were part of the answer—and in the White House Johnson will certainly continue to insist on both. A certain ruthlessness was another part of the answer. But there was something else as well—an X quality, something indefinable.

"I don't quite know why it is," an old friend of Johnson has said, "but whatever Lyndon *really* wants, he gets in the end."

And getting what he wants is a useful quality for a President of the United States to have.

Condensed from The Saturday Evening Post



Poetic Licence

WHEN Charles Babbage, the English mathematician, read Tennyson's poem "The Vision of Sin," he wrote to the poet: "In your otherwise beautiful poem there is a verse which reads, 'Every moment dies a man, Every moment one is born.' It must be manifest that, were this true, the population of the world would be at a standstill. In truth the rate of birth is slightly in excess of that of death. I would suggest that in your next edition of the poem it should read, 'Every moment dies a man, Every moment one and one-sixteenth is born.'

"Strictly speaking this is not correct. The actual figure is a decimal so long that I cannot get it in the line, but I believe one and one-sixteenth will be sufficiently accurate for poetry."

—James Newman, *The World of Mathematics* (Allen & Unwin, London)

LIVING CAMOUFLAGE Nature's Call to the Colours

By Donald and Louise Peattie



In a watery green abode, with a lily pad for a roof, lurks the frog

Most of the colour that floods the world seems to man to have no purpose at all. It is sheer, delightful superabundance of life's energy. But for countless animals colour is a master weapon in the great game of survival. The camouflage of nature is better than any that man has ever devised, and when animals perfectly match their backgrounds, they are both safe and alert to attack their own prey. Mr. Toad looks like a lump of the earth he squats on. Agile Mr. Frog is as green on top as the scum of the pond where he floats, but underneath he is pale as light seen through water. The polar bear and

Condensed from National Wildlife

OTT/AUDUBON SOCIETY



The willow ptarmigan. As the snows melt, the bird will slowly change its white feathers to brown

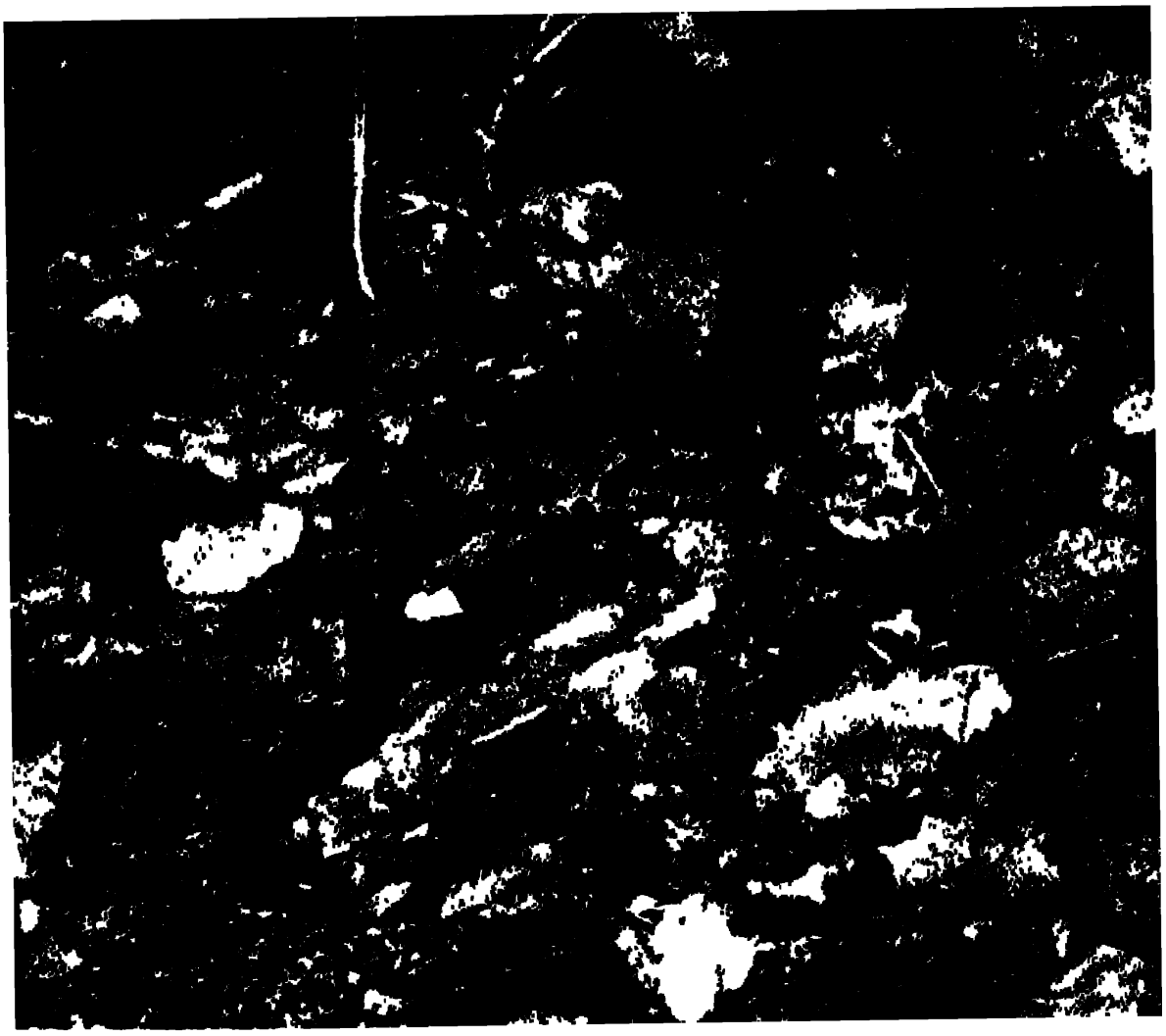
snowy owl are white as the Arctic wastes. Brilliant tropical fish hide amid the bright-coloured coral of the reef.

The plover's pebble-dash eggs are laid just above the highest wave mark on the sea-shore, and blend with the shingle. So does the dappled fawn, lying motionless, blend with the forest floor. And the underwing moths look so like the bark of the trees where they alight that they are as good as invisible. But give one a poke, and it flies off displaying the delicate pink underside of its wings.

Some creatures camouflage themselves with material from their surroundings. One larva uses lichen, another dead ants. Masking crabs have horny bristles on which they hang disguises of algae or sponge. The sponge crab cuts out a colourful sponge mask, just the right size to fit, and holds it in place over its back with a special pair of legs. As for the squid, it can eject a small cloud of ink, roughly the shape and size of itself; then it slips away while the enemy is distracted by the ink cloud.

Quaint and curious are some of the efforts to avoid detection. Certain tropical mantises are coloured like the flowers of their favourite tree. In South America is found the glass-winged butterfly, so transparent you can see through its wings —and so perhaps not see it at all. And the dead-leaf butterfly resembles a bit of old foliage not only in colour but in delicate venation and ragged outline. Even its slow, swirling flight is like that of a falling leaf.

The stick insect looks exactly like a twig not only in colour and shape but even in the angle at which it perches on the branch. Touch it, and it will continue to play possum, but if too much annoyed it will put out the legs it has held close to its body and stalk away with an air of offended dignity at having had its disguise penetrated.



Danger unseen—among the fallen leaves, an almost perfectly camouflaged copperhead snake!

The ability to behave so that the colour camouflage is nearly perfect is characteristic of the American bittern. This slim bird of stripy plumage will stand perfectly still among reeds with its bill held almost straight up, the better to merge with its background.

A moth marked like a dead leaf will orient its position so that its markings coincide with those of the leaf on which it settles. Certain tropical insects gather together, heads all one way, to form a pattern resembling the flowers of the tree on which they rest.

The bright plumage of the male bird may well appeal to his lady. But it also serves to attract attention away from the female's quieter garb, thus keeping her the safer. A male bird may also display some brilliant coloration to frighten a rival, as in the case of the Chinese ring-necked pheasant. On the side of his neck the male carries startling red pouches, which he can puff out in an encounter with another male.

PHOTOGRAPH: LEONARD LEE RUE III/MONKMEYER



Nature matched the white-tailed fawn to the dappled tones of the autumn forest

This immediately reduces a challenger's confidence; he may even skulk away without a fight. If, however, you diminish the apparent size of the victorious bird's pouches with black water colour, the challenger advances with such confidence that the champion will retreat.

When we think of an animal quick-change artist, we usually think of the chameleon, which by doing a sort of slow burn can match a new background. But far more astonishing colour changes are found among fish, frogs, squid, crabs and shrimp. A young prawn can change colour completely sometimes in a few minutes, and has a wonderful repertoire of tints: green when in seaweed; violet, brown, red or blue-green as it moves among coloured algae; transparent blue at night. A flounder has both eyes on one side of its head, but even lying flat looking up it can note changes on the sea floor and modify its colours accordingly. Placed above squares of patterned linoleum, it will adjust

PHOTOGRAPH: LEONARD LEE RUE III/BONNIER'S

itself to match, all the while waiting for dinner to pass by.

Another meaning of colour is that shown in the fantastic relationship between some birds and bees and their favourite flowers. The lip-like lowest petal of certain orchids bears a yellow marking strikingly like a female wasp. The male wasp alights there eagerly, and by the time he has discovered the deception two tiny pellets of pollen, connected by a spring-like band, have been clamped on the side of his head by the plant. When next he visits such a flower the pellets are hooked off by the orchid, which thus achieves pollination.

Many creatures are colour-blind, and see the world in greys and blacks and whites. But even a colour-blind enemy can be deceived by the kind of protective coloration called disruptive. This is the marking or mottling that breaks up an otherwise identifiable outline.

A snake motionless in the grass is often missed because of the pattern on its back. Spotted giraffes and striped zebras are hard for the hunter to see, even at fairly close range, in their native veld. A partridge or quail on the floor of the woods may not be seen because of its mottled feathers.

As there is no outline harder to conceal than a circle, even a wary eye can give its owner away. But the racoon wears markings like a black mask that divert attention from his pupils, and many a bird has a black or white streak through the eye, or a patch round it, to draw attention from that bright jet gaze.

These devices, and thousands like them, are an irreplaceable part of nature's grand strategy for the game of life.

Visible at second glance is a quail, alert but quiet on her nest



LEONARD LEE RUE III/MONKMEYER

Valencia's Tribunal of Waters



By Robert Littell

After a thousand changing years, this simple Spanish court continues to dispense homespun justice that has stood the test of time

HANDLESS, mutilated, with eyes blinded by six centuries of time and weather, the Twelve Apostles look down from their Gothic niches in the north portal of Valencia's cathedral. Below them, in harsh contrast, trams jangle, lorries grind, tourists' cameras click and whir.

For it is Thursday, and here in Valencia, Spain's third largest city, on the stroke of noon every Thursday, there is renewed an institution more ancient than the stone robes of the Apostles, yet in spirit more modern than the clang and clash of twentieth-century machinery. It is the open-air "Tribunal of Waters," the oldest court of justice in Europe, a court of equals where the farmers of Valencia's vast irrigated plain have dispensed their own impartial justice to one another, without records, clerks, briefs or dockets, without interference from kings or governors, for over 1,000 years.

Behind a portable iron-grille railing stands a half-circle of black armchairs and, as 12 strikes, eight bareheaded farmers, each wearing the traditional black smock of the Valencian *labrador,* solemnly take their seats.

"The court is in session," declares its president, and the constable steps forward, holding the symbol of the court, a halberd-like staff tipped with a menacing brass hook. One by one he calls out the liquid names of the eight canals which spread the

Condensed from Die Weltwoche, Zürich

waters of the capricious river Turia over the Valencian plain—"Fabara, Mislata, Rascaña, Robella . . ."

What farmer along one of these life-giving waterways stands accused of misusing it today? Two men uncover their heads and step forward. "I accuse Manuel Fulano here, . . ." one of them, a canal guard, begins. The curious crowd leans over the iron railings to catch his words, but they are lost in the rumble of a huge lorry piled high with crates of oranges.



UPON the sunbathed, fertile farmland that surrounds Valencia, rain falls, on the average, only one day out of seven. Twenty-five thousand acres of onion fields and rice paddies, of tomatoes and artichokes, of market gardens and orange groves, would wither and die without constant transfusions from the Turia.

Like most rivers in southern Spain, the mountain-born Turia is either torrent or trickle, lean goat or raging bull. Over the centuries, the Turia has been tamed, domesticated, harnessed; its waters have been diverted into a complex network of canals which dwindle down to hundreds of miles of rivulets in long, narrow, concrete troughs. Every so often there is a gate which can be opened to let the water out on to a thirsty plot of land. Thanks to the water, three or four crops a year can be raised, making it possible for a whole family to live off an acre or even less. But only if the

water is fairly and honestly divided; only if 15,000 farmers abide by the rules they began making for themselves ten centuries ago.

WHEN at last the traffic lets him be heard, the guard of the irrigation canal near Campanar tells the Tribunal that Manuel Fulano rose before dawn, broke the lock on the water gate with an axe and irrigated his land for two illicit hours. Fulano's explanation is that he was trying to make up for the water he believes he should have had the week before. After a few muttered consultations, the Tribunal of his peers finds him guilty, and orders him to pay costs and penalties.

From this verdict there is no appeal; no other court in Spain will listen to Fulano. And he will pay the fine and the damages promptly, because if he does not, water will be denied his land. Fulano may grumble, but at heart he is proud of his Tribunal, as are the many hundreds of offenders who have stood, cap or beret in hand, under the stone-robed Apostles.

Juan N. is up for cutting trees along the canal's right of way; Carlos E. has washed vegetables in the communal watercourse; Luis O. has allowed his cattle to walk along the soft earthen dikes. All are penalized, yet none of them would exchange his Tribunal. swift, simple, shorn of everything but justice itself, for the frustrations and delays of an ordinary legal court.

In Valencia's irrigated plain, a plot of land and its supply of water are inseparable. When a man buys land, he buys also the land's stated share of water—an unvarying fraction of the total, which may be plentiful or meagre according to how much rain has fallen that season, on mountains a hundred miles away.

If the rains fail, the river shrinks and temptation stalks the land. Men who believed themselves honest leave a gate open just a little longer than their due. Some make themselves a private key to the main gate. Others take water ahead of the strict schedule. The next Thursday, instead of four cases, the Tribunal has 14.

As growing Valencia pushes out into the surrounding countryside, more and more of those summoned before the Tribunal are builders, businessmen, municipal officials. A soft-drink distributor has to pay 9,000 pesetas (Rs. 700) damages for letting into the canal the water in which his bottles were washed. When a new housing development, for lack of a proper sewage system, uses the canal instead, the mayor himself is summoned. (He doesn't come in person, but he admits to the Tribunal that the city was in the wrong.) A soap factory contaminates irrigation water with its residue. The company's lawyer comes to the cathedral, but refuses to enter what seems to him a mock Tribunal, interesting only to tourists and antiquarians. When his company is

sentenced to pay a 39,000 pesetas' (Rs.3,000) fine, he is more respectful.

The amount of the fines is fixed according to a scale which has come down from mouth to ear for many generations. The fine imposed on Martín, who flooded his neighbour's land because he forgot to shut off the water, is the same as that meted out to Isidro, who did the same thing out of spite after a quarrel. The court is concerned with facts only, not with moral judgements.

The penalties that really hurt—costs and property damage—are not assessed by the Tribunal, but by the equally ancient local organization which stands behind it. Each of the eight canal systems, each *acequia,* is ruled by an executive committee which chooses an unpaid *síndico* to oversee the canal's budget, operation and repairs. Sitting together, the eight *síndicos* form the Tribunal. Each *acequia* has its own rules and its own special patrolman, the *guarda tornero,* who checks the padlocked main gates of his *acequia* every day. He pulls out weeds and branches, notes leaks and repair jobs, and makes sure that no one is getting water overtime. By the Tribunal's long tradition, the *guarda* needs no witness to corroborate his charges; his testimony is accepted as *"palabra de rey"*—as good as the word of the king.

No one knows which people it was whose patience and skill laboriously turned the fever-laden swamps of the Turia's delta into a garden intricately veined with watercourses. Some say that they were Romans. Others believe that they were Moslem farmers brought by the Arab invaders, whose caliphs (in about the year 960) created a Tribunal to administer the ancient Arab laws of water.

Five centuries later, the Arab conquerors were driven from Spain. But unchanged, in a rapidly changing world, the Tribunal—Christian now—continued to sit on Thursdays as it had for so many Moslem generations, because Thursday is the eve of Friday, the holy day of the Moslem week. The mosque which had sheltered the Tribunal was torn down and a cathedral erected in its place. But many of the farmers brought to judgement were still Arabs, to whom, as Moslems, entrance into a Christian church was denied. Therefore the Tribunal held its sessions on unconsecrated ground, out of doors, yet within the cathedral's sheltering shadow.

There is no written or unwritten clause of any law or constitution in Spain which warrants the existence of the *Tribunal de las Aguas.* Like the roots of some ancestral tree, its powers go down deep into the soil of tradition.

The Valencian farmers today feel no passion for antiquity as such. They have kept pace with the times technically; they use modern machinery, fertilizers and insecticides. They retain their thousand-year-old Tribunal because it, too, like a good

new tool, is streamlined, practical, efficient. They point out that, compared with the ordinary courts of law, it costs almost nothing: the *síndicos* serve as unpaid judges; the part-time salaries of the legal adviser, the executive agent, the secretary and the bailiff total less than 33,000 pesetas (Rs. 2,500) a year. Nor are there the months of waiting—years if there is an appeal—as so often is the case in an ordinary court.

"Our Tribunal doesn't waste paper," says Ramón with pride—and with scorn for the courts that do. No one transcribes the testimony, no sentences are published. "We Valencians," he adds, "have inherited a mistrust of written contracts and of signatures on legal documents. Our word is our bond in daily business—why should it not be the same when we are in court?"

What the farmers speak of less often, because it is a quality which belongs to the Tribunal as much as the stones it is made of belong to the cathedral, is the court's impartiality and its fairness. (In what other court can one see its president—as has happened within recent memory—step down and suddenly stand in the culprit's place?)

Here is no elaborate machine, somehow apart from the citizen who pays for it, but a sturdily simple and direct piece of self-government, dispensing impartial, homespun justice under the benevolent eyes of the Twelve Apostles.

Animal Antics

AN ELDERLY billy goat was quickly eliminated from the Corowa, Australia, show-goat championship, and he was placed in the back of a truck.

He watched for a while, then leaped out, made straight for the winning goat's pen and swallowed the first-prize card. —AP

IN WASHINGTON a narrow bridge has been built over a busy street near a park so that squirrels in search of nuts can avoid the whizzing cars. The human pedestrians will still have to look out for themselves.

—*N.O.T P.*

"THE NEIGHBOURS' pet rabbit, Meiling, brown and white with amber eyes, is in Mabel Johnson's garden wrecking the phlox. Mrs. Johnson is unable to take any action against the animal, as it was named after one of her dear friends." —From the Edgartown, Massachusetts, *Vineyard Gazette*

Exciting discoveries made recently by Dr. Hans Selye, the famous researcher who developed the stress theory of disease, may lead to ways of delaying man's ageing process

New Search for the Fountain of Youth

By J. D. Ratcliff

On February 19, 1962—the day before American astronaut John Glenn went into orbit—a group of U.S. Air Force medical researchers sat in the University of Montreal office of Dr. Hans Selye, discussing the stresses man could expect to face in space. One officer asked an idle question: Didn't Selye worry about fire in his magnificent library—the world's best collection on glands and stress?

Dr. Selye laughed. The library, he said, had been started in Vienna in 1848, and in over a century there had been no fire. Further, workmen were at that moment installing a new fire-protection system.

Within 24 hours calamity struck. Fire, possibly started by a workman's blowlamp, raced through stacks of journals, reprints, precious books. The library was almost totally destroyed.

Response to this disaster provides heartwarming evidence of the esteem in which the world holds Hans Selye. Offers of help in rebuilding poured in. The Rockefeller Institute offered duplicates of anything in its library. A Russian researcher sent copies of all his

papers and urged colleagues to do the same. A Canadian housewife sent one dollar and a note: "It isn't much, but I would like to do something." Foundations and individuals in many countries have contributed over 600,000 dollars (Rs. 28·5 lakhs) to rebuild the Selye library.

By any measure, Hans Selye is one of today's most remarkable research men.* With equipment no more elaborate than a pair of dissection forceps he developed a theory as broad as Pasteur's concept of the germ origin of disease. According to Selye, sustained stress of *any* kind —worry, injury, continuous fatigue —brings on the bulk of human misery, from artery hardening, to heart disease, to arthritis.*

And now Selye has developed a concept even more striking: With increasing age the human body loses its ability to wash out products of its own metabolism—particularly calcium. Accumulations of calcium at various points in the body account for scores of diseases, from arthritis to gallstones. "Old age itself," according to Selye, "may be an expression of calcium shift from bones to soft tissues." If this shift can be prevented, the ageing process may be stayed and an ancient goal—a medical fountain of youth—realized.

Born in Vienna 56 years ago, Selye is slightly built, with greying hair. His Hungarian father, his grandfather and his great-grandfather were doctors. By the time he was eight he spoke four languages: Hungarian learned from his father, German from his Austrian mother, French from a nurse, English from a tutor. Today he lectures without notes in ten languages, including Russian, Portuguese and Czech.

Selye leads a Spartan life. Up before 5 a.m., he does press-ups, rides a stationary bicycle, takes a cold shower, cooks his own breakfast and reaches his office at six o'clock. "I sometimes find the three hours of solitude before the others arrive the most productive of the day," he says. At 9 a.m. the lab rounds begin and at 10.30 Selye takes his place at the head of a horseshoe-shaped, stainless steel lab table. Magnifying spectacles perched on his nose, he begins examining experimental rats, looking for clues to human disease. Assistants—young scientists from all over the world—cluster round.

Lunch is a sandwich and some fruit brought from home. Until a few years ago there was a ritual for late afternoon. With his four children trotting behind him, Selye would do two laps round the big McGill University grounds, near his home. Recently a sore hip, injured when he fell while climbing a tree, has interfered with this. After dinner with his wife and children, there are geography and word games to stimulate the minds of the young. At 9.30 lights are out.

* See "Stress—The Cause of All Disease?" The Reader's Digest, February 1955

It was 25 years ago that Selye noted the extraordinary phenomenon that led to his stress theory. If rats were subjected to *sustained* stress of *any* kind—heat, cold, fatigue, frustration, injury—he found that deadly internal wreckage resulted. They got the rat equivalent of human ulcers, heart disease, hardened arteries, arthritis, etc



Dr. Hans Selye

Selye reasoned his way to an explanation. At all times the body strives to maintain equilibrium. In the main the balancing job is done by the pituitary gland under the brain, and the two adrenal glands astride the kidneys. Whenever the body is confronted with a challenge it is the task of these glands to meet it. If the body is chilled, hormones constrict arteries and hoist blood pressure to provide greater warmth. If there is infection, an area of inflammation is laid down to localize damage.

But suppose the challenge is continuous? Isn't it possible for the glands to be worked to death, to be thrown out of chemical kilter?

Selye put caged rats on the lab roof in frigid winter air. For a while they frisked about happily. Then they began to slow down. Finally they huddled in abject misery. When they were autopsied, the extent of internal wreckage was truly amazing. Adrenals were bloated to three times normal size. There was lymphatic wreckage, ulcers.

Would other stresses have the same effect? Rats were put in revolving cages, poisoned, subjected continuously to screeching sirens, frustrated by being strapped on their backs. Always there was the same internal wreckage—wreckage that mimicked dozens of human diseases.

There could be but one conclusion: "The apparent cause of illness is often an infection, an intoxication, nervous exhaustion, or merely old age. Actually, a breakdown of the hormonal adaptation mechanism seems more frequently to be the real cause."

The broad principles laid down by the stress theory triggered hundreds of research projects. The theory anticipated the discovery of cortisone; it opened the way for control of malignant hypertension—usually deadly within months—by

removal of adrenals. Recent work shows that cholesterol in the blood shoots upward during emotional stress, possibly explaining why worriers are prone to heart attacks. To quote the *British Medical Journal:* "The value of a theory lies in its capacity to weld together isolated facts, to stimulate research. No theory in living memory has possessed these virtues to a greater extent."

Now Selye has come up with his new related theory which, according to Dr. Franklin McLean, emeritus professor of physiology at the University of Chicago, "is sure to have an impact on medicine comparable to the earlier stress theory."

Selye got the first glimmerings of this concept in 1927 while still a medical student at the German University of Prague, Czechoslovakia. He puzzled about the vital role calcium plays in the body. Calcium was all right so long as it stayed in its major repository, the bones. But why did it migrate to other places to cause misery, disease, death to freeze shoulders of athletes and violinists; to clog and harden arteries; to destroy vital kidney tissue; to choke off the oxygen absorptive capacity of the lungs?

Vitamin D had just been discovered and was known to play a key role in calcium metabolism. What would happen, Selye wondered, if you gave rats walloping daily doses of the vitamin? What effect would it have on stored calcium? Selye *obtained a batch of rats and began daily injections.*

When the rats were finally killed and dissected, they provided an eye-opening spectacle. Their hearts, kidneys, lungs and other internal organs were heavily calcified and in the process of turning to stone!

Five years later, working at Johns Hopkins Medical School in Baltimore as a Rockefeller research fellow, Selye had another question. What would happen when rats were given parathyroid hormone, which, like vitamin D, is also involved in body utilization of calcium? The result added another chapter to the Prague story: calcium deposits formed in the skin, plus strange, stone-like patches of calcification in the necks of the animals. What did it mean?

Selye laid the entire project aside when he moved on to teach at the McGill medical school, and later to head the University of Montreal's Institute of Experimental Medicine and Surgery. The next 25 years were devoted to developing his stress theory. Yet that troubling business about the calcified rats never completely left his mind.

By 1960 he was ready to go back to it. Major staff members were summoned. Among the ten qualified men there were scientists from India, the Argentine, Czechoslovakia, the United States, Italy, Belgium. Selye outlined his ideas.

It seemed remotely possible that this calcium business might be

rather like allergy. In allergy an individual becomes sensitized to, say, ragweed pollen; next time the pollen is encountered he reacts with a runny nose and bleary eyes. Perhaps vitamin D and parathyroid hormone sensitized animals. Later, when the animals encountered a "challenger," they reacted—their calcium metabolism went berserk. Selye recalled that in humans calcification often follows injury: frostbitten ears frequently harden, badly burned skin calcified, etc. What if slight injury was inflicted on hormone- or vitamin-treated rats?

The first step was to start giving rats moderate to heavy daily doses of either DHT (a vitamin D relative) or parathyroid hormone. Then, after a waiting period, the animals were given slight pinches with forceps. Within 48 hours skin at the pinched spot had become stone-like. It had calcified! At last it became clear why the necks of the animals at Johns Hopkins University had hardened. Selye had picked them up by their necks for injections. Even this slight pressure was enough to trigger calcium deposits.

Would other things beside injury achieve the same result? Chemicals, for example? The researchers tried just about everything in the lab's chemical cupboard, and right from the beginning results were arresting. When animals were challenged with metallic salts—particularly compounds of iron, chromium and lead—internal organs were wrecked by whitish calcium deposits. Depending on which challenger was used and how it was administered, calcium could be laid down at will almost anywhere—in heart and arteries to mimic cardiovascular disease, in joints to mimic arthritis, in the spleen, liver, lungs, pancreas, salivary glands.

By now, it was clear to the researchers that they were dealing with an entirely new phenomenon. Borrowing from Latin and Greek roots, Selye named it calciphylaxis —increased sensitivity to calcium.

As the work continued, strange things began to happen. In one experiment Selye wished to produce a massive calcium migration which would almost totally deplete an animal of calcium stored in its bones. (On a lesser scale this happens in humans; as calcium is drained away, aged bones become brittle.) A rat was sensitized with DHT, then an iron salt was infiltrated under the skin in the hope of drawing the stored calcium to this part of the body. Everything progressed as planned—the rat's skin gradually became rock-hard. Then at the end of three weeks a startling thing happened. The rat started nibbling at its stony shell. It was shedding! Fresh new skin and hair were underneath; from within the old, dead-beat rat a rodent teenager emerged.

Might the same procedure be used on humans—not to bring about total shedding but only to remove

the skin of a selected area? To get rid of, say, scars, blemishes, wrinkles on the face? It is a future possibility. "But at the moment," says Selye, "our chemicals are far too toxic for human use."

In another project Selye decided to study generalized calcification rather than calcification of a single target organ. A batch of young female rats began getting huge daily doses of DHT. Within 60 days they were like tottering old women. Teeth had deteriorated. Body weight had melted away. Cataracts obscured vision. Skin was wrinkled, backs were hunched. Hair had fallen out to give a moth-eaten appearance. There was calcification of vocal cords (which gives aged humans their high-pitched quavering voices).

Only one conclusion could be drawn from these observations. Always before, researchers had assumed that calcium shift was the natural *result* of the ageing process. "It now appears likely," says Selye, "that the shift is the *cause* of ageing."

Were there chemical preventives for this induced senility? Selye began injecting animals in the accelerated ageing programme with iron dextran, a drug which, though dangerous, has been used to increase the haemoglobin content of the blood. Possibly, he reasoned, molecules of iron coursing through the bloodstream would attract microscopic bits of calcium—holding them in captivity and preventing their being deposited in tissues and organs.

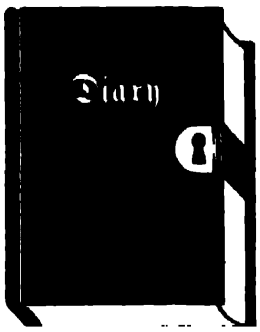
The hunch was right. Animals that got injections of iron dextran remained youthful while their brothers progressed rapidly to old age and death.

Thus, characteristics reminiscent of senility have been *produced* and *prevented* in rats. Are these observations translatable to man? "It seems improbable," says Selye, "that such a fundamental reaction should not exist in man. It is unlikely that we will ever be able to make a man of 90 regress to 60. But it appears quite probable that we shall be able to prevent the man of 60 from progressing to the condition of a man of 90."

Calciphylaxis suggests other extraordinary possibilities. At will, calcium can be laid down in almost any organ or tissue by careful adjustment of sensitizer and challenger. Do combinations exist which will deposit it in cancers—in effect building an escape-proof stone wall around them? In one series of rat experiments Selye's group has achieved this. Since then they have been unable to repeat the experiment, but major effort is being expended in this area.

Thus, in dozens of directions the new concept opens exciting vistas. Calciphylaxis, according to *Medical Tribune,* "may well be regarded a generation hence as a landmark in experimental pathology."

Your Savings Account of Memories



A diary can pay interest in all sorts of unexpected ways

By John Fisher

I NEVER used to keep a diary until, one evening, I watched my wife reading hers. She was sighing reminiscently as she turned the pages. "I enjoyed our honeymoon so much," she murmured. "I can still remember every detail of it: the wallpaper in our room and even the green and red stripes of those fish we caught near the islands." I looked over her shoulder, and was astonished to see that she had written only three words—"Roches Fleuries, Aiguebelle"—on that bright day. Three words, but just the name of that hotel helped us to recall so much more: the flower-covered rocks, the sound of the wrinkled blue sea below, walks together through the hills scented with pine and rock-rose, the fishermen playing bowls, the fair where I won a bottle of wine. And so much else besides.

At that moment I decided to start my own savings account of recollections, and already my diary has preserved a thousand different memories, all precious to me: the routes of favourite walks, snatches

Condensed from Woman's Day

of conversation, the proud moment when my son came home with his first tennis cup, the state of the tide the day I capsized my sailing boat, and the woe which beset us all when we got back from holiday to find a robin dead near her nest in the garage, because we had forgotten to tell the police *not* to shut the garage window.

The mere process of compiling a diary brings its own reward, a sense of order and propriety, a feeling that not a drop of goodness has been spilt or lost during the 24 hours. It also provides relaxation. Within its pages you can be free from the self-justification that you so often feel tempted to impose on the outer world and, because you write only for your own amusement and not for posterity, you can be entirely honest.

I believe, too, that everyone can draw comfort from looking back in a diary to see how unimportant past controversies now are, or to see how his own ideas have changed. For instance, 18 months ago I wrote: "Phyllis clamouring for dog: for the children's sake, she says. Told her that in the city it would be unfair to dog. Had to put my foot down."

Then, about a year ago: "Came back from office to find enormous black-and-white dog monopolizing hearthrug. Children have named him 'Tinker.'"

One winter's day some months later: "Am certain evening walk is doing me as much good as Tinker. Good idea of mine to get a dog. . ."

And what a sense of proportion you get by looking back over the past. Whenever I need a little extra faith in the future I turn to an entry written in my wife's diary in 1940, a few nights after we were bombed out of our London flat: "Bombed at 5.30. The most awful week of my life. We feel like refugees." I wrote the next day: "Insisted that Phyllis go to the country for safety. Is ours a broken home after only two years of marriage?" I thought at the time that it must be. I felt that we should never succeed in bringing up a family, that I should never manage to pursue my peacetime career again and that the war would never be over. Today that entry, "The most awful week of my life," reminds us both how transient our present disasters can be.

Meanwhile, I find that my diary gives me an extra zest for life, for each moment of the day may provide me with just the material I am seeking. Surroundings assume new colours. I notice details that before would have passed me by. Knowing that I may write about something or somebody gives me a new sense of awareness.

A diary can be made up almost entirely of trifles. Simply include everything of importance to you. I like to record unusual phrases and expressions that catch my imagination. Because I can't remember jokes, I write down the ones that

I think might be worth re-telling.

A diary earns its keep in all kinds of unexpected ways. In insurance matters, the exact knowledge of times and dates and places can often tip the balance in your favour when you make a claim. When you entertain, a diary can keep you from serving roast beef and chocolate soufflé to the same friends for the third time running.

One useful entry in my diary read, "Phyllis umbrella, November 7." I had made it six months before when my wife remarked that her umbrella was worn out, but not worth replacing before the winter. November 7 is her birthday and, when it came round, my diary ensured that there was no problem about what to give her. Her amazed, "How on earth did you know?" made the entry worth a thousand words.

There is no compelling reason why a diary should begin on January 1. I started in February with an entry reading, "Thawed out frozen waste-pipe with hot-water bottle."

The number of words a diarist writes varies each day according to his mood. On the day that the French Revolution began with the storming of the Bastille, Louis XVI wrote only one word in his diary: *"Rien."* ("Nothing.")

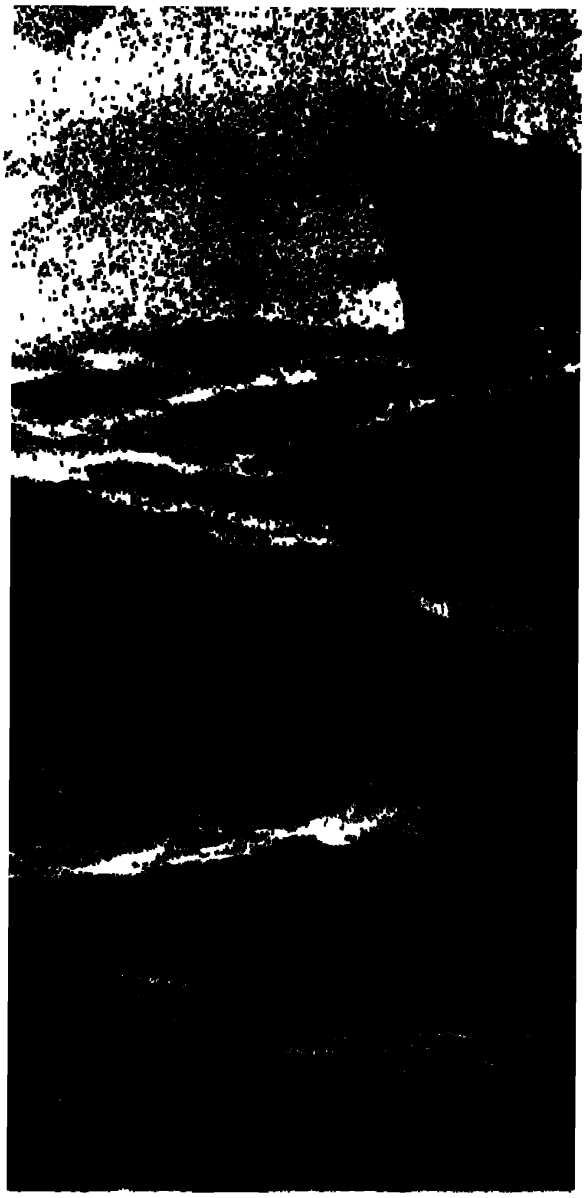
Diary writing, of course, involves a certain amount of self-discipline. There is a challenge which occurs particularly when the thought of keeping it stands between you and a hot bath or a book at bedtime, or when you must wake earlier in order to keep your entries up to date. But once you get the habit, it is not hard to keep going. All you need is a love of life, the conviction that it is short and that every moment is precious.

Mark My Words

JAMES Gordon Bennett had a list of editorial taboos for his *Paris Herald*. One pet injunction involved the verb "to stay." Nobody can stay at a place, he must stop or remain. The French linotype operators, aware of most of the don'ts, applied them automatically when missed by a desk man. Thus it was that an operator corrected a sentence in a reviewer's report on a music-hall show describing the contortions of "a lady trying to adjust her stays." What got into the paper was "a lady trying to adjust her remains."

—Eric Hawkins with Robert Sturdevant in *Hawkins of the Paris Herald*

Toughest Little Ships Afloat



By James Nathan Miller

Whether plodding the sea lanes with their enormous tows or racing to the aid of a ship in distress, Holland's famous oceangoing tugs have earned the respect of seamen the world over

To anyone but a Dutchman the scene that autumn in the river town of Kinderdijk, in the Netherlands, might have caused bewilderment. A ship was being launched with elaborate ceremony, its sponsor Crown Princess Beatrix, the guests the cream of Dutch aristocracy and officialdom. The band played, the champagne bottle smashed, the hull slid down the ways, and there in the water lay the



newly christened *Zwarte Zee*—a tugboat!

Zwarte Zee, the fourth ship of that name, is no ordinary tugboat but the bearer of a briny heritage of national esteem. She is the flagship of L. Smit & Co.'s Internationale Sleepdienst (towing service) of Rotterdam, the world's largest operator of oceangoing tugs.

For almost a century the Dutch have largely monopolized the formidable business of pulling the seemingly unpullable around the oceans of the world, and spitting in the hurricane's eye along the way. As a British merchant skipper phrases it, "It takes a blinking crazy Dutchman to go out in those blinking crazy corks."

At the moment *Zwarte Zee* slid down the ways, the rest of Smit's 22-ship fleet, scattered in every one of the seven seas, was accounting for

half the world's transocean commercial haulage. *Ierse Zee* and *Tasman Zee* were straining eastward across the South Atlantic in tandem, hauling the monster supertanker *Naess Spirit*, which had dropped her propeller to the bottom of Rio de Janeiro's harbour, to a repair yard in Cape Town. *Witte Zee* was towing a ferryboat and a refrigerated barge from Bilbao, Spain, to Montevideo, Uruguay. *Elbe* had a floating crane in the Arabian Sea going from Abadan to Karachi. *Caribische Zee*, having just refloated a tanker grounded on the western tip of Cuba, was steaming full speed to the disabled Panamanian steamer *Christopher*, wallowing helpless off Honduras.

It's a wild and woolly business, this ocean tugging, a throwback to the days of wooden ships and iron men. The crews are out of sight of land longer, and work closer to the water, than those of any other merchant ships. In one howling storm in the Bay of Biscay two Smit tugs hauling a tin dredge to Indonesia battled the waves for three solid weeks without making any progress.

Come aboard one of these drayhorse corks, the Smit tug *Noordzee*, as she strains heavily down the South American coast By tugboat standards *Noordzee* is a big ship—about twice the size of a harbour tug—but the high bridge-house forward, the flat, saucerlike working space aft that occupies half her length, and her heavy-churning muscular wake stamp her for what she is. So does her tow, a third of a mile behind: two tremendous steel pontoons, each twice as big as the tug itself. Loaded piggyback on one of them are a harbour tugboat and a huge dragline crane; on the other are 350 tons of heavy metal pipe. They are bound from New Orleans to Tierra del Fuego at the bottom of South America.

Though the day is clear and calm by big ship standards, there is a constant roll and pitch on *Noordzee's* deck. Much of the time the pontoons are out of sight to her 22-man crew, for so close is their ship to the sea that these tugmen, when in the trough of a wave, are looking *up* at the wave crests. And when the wind begins to howl and the combers build up, the men must actually go *into* the water—sometimes up to their necks in it—to tend the towline on the afterdeck.

It takes a special breed. "We can't have men who are too careful in this business," says Arthur Wijsmuller, one of the managing directors of Bureau Wijsmuller, Smit's largest competitor. "A careful man tends to be limited in his decisions."

Though any tugboat master could sail an ocean liner across the Atlantic, the average ship's master would soon find himself in trouble trying to handle a tug and its tow, for this is an immensely specialized job On *Noordzee's* tiny bridge, Captain A. W. van der Poel must be for

ever looking back over his shoulder. Like a kite on a string, the tow has an evil propensity to swing back and forth in ever-increasing arcs, and it can go rushing far off on the tug's beam and actually pull ahead of her. Then its monstrous cable, slicing through the water, claws sideways at the tug with such malevolent force as to take control of the vessel and put it in danger of capsizing.

When a high wind starts pushing at the great "sail" of a tow's hull, even the most skilful skipper can find himself in great danger. In December 1962, Smit's *Oceaan* was pulling an old Great Lakes ore boat loaded with 7,000 tons of scrap iron from Quebec to Genoa when a near-hurricane slammed down on the two ships

The ponderous laker, ten times as heavy as the tug, went careering off on *Oceaan's* beam and dragged her sideways so viciously that the tug couldn't answer her helm. Her entire afterdeck was pulled under the waves and she started tipping ominously to port. There was nothing to do but send men into the raging ocean on the afterdeck to cast off the towline. The laker sank two days later.

You'll see more foul weather from the deck of a tug than from any other ship. On the *Noordzee's* slow voyage down South America, half a dozen vicious gales pounce on her. When she reaches Tierra del Fuego, she is 104 days out of New Orleans and has covered 8,200 miles at an average speed of under four knots. And then she is off again immediately, this time across the Atlantic to Swakopmund in South-West Africa to pick up another tow.

These tugs trace their ancestry to 1860, when an Englishman named John Roger Watkins demonstrated that the easiest way to get a dredger from Gravesend, Kent, to Cadiz, Spain, was to drag it there—by sea. Those were the days when empires were being carved out of the jungle, and there was a huge demand all over the world for bucket dredges and sandsuckers to build harbours and make rivers navigable. The Dutch combined a seafaring tradition with vast experience in river dredging and canal building—a combination precisely suited to the needs of the oceangoing-tug business. Soon Dutch-built dredgers hauled by Dutch tugs were crawling all over the globe.

Dutch tugboat skippers quickly became recognized as among the world's finest seamen. One navigated a tow through the Straits of Magellan in wintertime without charts. Another, while connecting up to a drifting ship in a gale off the Netherlands coast, took his tug so hard in on the churning breakers that when he eventually got back to deep water his deck was covered with sand.

At the same time, the crews were enhancing their own reputations on the waterfronts of the world as the

roughest, toughest sailors afloat. Once, in Singapore, a tug crew took on most of the complement of a U.S. destroyer and handled them with such dispatch that next day, as the tug steamed down the harbour, the Americans lined up on their afterdeck and stood respectfully to attention.

Among the tug crews themselves, none were tougher than the "runners" whose lonely, dirty, dangerous job it was to ride the tow to her destination. A semaphore signal to the tug was their only contact with the outside world for weeks on end. Wet and freezing in a North Atlantic winter, or slowly dehydrating under the pitiless red eye of an Indian Ocean sun, they pumped their charge when she took in too much water, hooked her up again when she broke loose in a gale, and occasionally swam for their lives when she sank under them.

Today the tugger's life is a bit easier, but not much. The ships are air-conditioned, the runners are in walkie-talkie contact with the tug, and after six months at sea the crews are flown home for two months' leave. But the basic conditions of sea and wind are the same.

One aspect of the oceangoing-tug business does not endear the corks to the maritime world. This is the fact that, in salvage operations, they are largely money-motivated angels of mercy.

At strategically spotted rescue stations in the Indian Ocean, the North Sea, the Mediterranean, the Persian Gulf and the Atlantic —wherever the web of shipping lanes draws together—Smit tugs wait at their docks to sail at ten minutes' notice, their radio operators scanning the airwaves for the signal of a ship in distress. At the Smit communications centre at Maassluis, in the Netherlands, 12 radios scan the short-wave bands, while in every major port of the world Smit agents have their own private ears to the wind.

Once a distress message has been received, the other facet of the tugboat's personality—her bloodhound role—comes into play. This remarkable little craft with her mammoth diesel engines can make about 20 knots when she has to. Such speed, combined with her superb manoeuvrability, makes her unexcelled as a rescue vessel and habitually takes her out when the wind is screaming its loudest and all sensible craft have long since made for the safety of the harbour.

Speed is essential to financial success. Because a rescue job can mean big money, competing ears are tuned to the same wave bands, other tugs have steam up and crews aboard, ready to pounce.

They come barrelling down on a distressed ship waving a contract. "I am proceeding to your aid," flashes the message. "Will you accept assistance under Lloyd's Open Form?" This refers to a legal document. Its heading, "No Cure

No-Pay," means that no matter how long or hard the tug labours to save a ship, if the rescue is unsuccessful the tug gets nothing. But the contract also provides that, if the rescue does come off, an arbitrator in London will award payment on the basis of the ship's value and the degree of danger she was in. For a valuable ship in serious trouble this can run into hundreds of thousands of pounds, of which the tug's crew shares a percentage.

So sometimes, while waves smash against a disabled ship, the airwaves crackle with the bargaining between victim and rescuer, and it is then that the merchant skippers curse the tugmen roundly as a flock of vultures.

Of course, when life is in danger the tugs forget the contract, for the crews are, above all, brave sailors who well know the code of the sea. In 1961 the motor ship *Achilles*, with 30 passengers aboard, radioed that she was drifting with a dead engine. The tug *Humber* put out from Ponta Delgada in the Azores, got a line aboard her and started pulling her to port. But Hurricane Debbie's main force hit them as they were a mile from the cliffs of Arcos Point, forcing both tug and tow rapidly towards the shattering breakers.

As they drew near the rocks, the tug's engine was pushed hotter and faster than it had ever been designed for. The towline looked ready to snap and foul her propeller. They could have saved themselves by casting *Achilles* off, but—what matter whether it was the lives at stake or the Lloyd's form that impelled them—they hung on until, providentially, the wind shifted and they could reach the safety of the open ocean.

Numberless ships and their crews owe their lives to the little tugs. They may look like the humblest craft afloat, but they show no humility to either man or weather as they inch their way endlessly around the world.

Many Hands Make Light Work

A crowd had gathered outside the cage of the mother orang-outang and her new baby at the zoo. Each time the tiny monkey tried to climb around the cage, the mother nonchalantly reached out with one of her paws and pulled the baby back.

"Just look at that big ape!" one woman said to her friend. "Doesn't she have a contented look on her face?"

"Why shouldn't she," her friend retorted. "She's got what every mother would like to have—four arms!"

—Cecile Diamond



"*Self-Portrait.*" *by courtesy of the Louvre, Paris*

He Opened the Door to Modern Art

"A painting should first and foremost be a feast for the eye," Delacroix said. And with his glowing, powerful pictures, he proved himself a master chef

By George Kent

A PARTY was in progress one day in 1833 at the Paris home of novelist Alexandre Dumas. All his painter friends were there to decorate the walls with murals. Eugène Delacroix was the last to arrive. Without taking off his cloak or putting on a smock, he picked up a piece of charcoal. With three strokes, there was a horse. Another five or six and the horse had a rider. Ten more and there was a landscape with minor figures. The other painters stopped working to watch.

Now Delacroix took brushes and palette and, with amazing swiftness, gave full colour to the tottering horse and bleeding rider, feet out of the stirrups, bowed over his lance. In two hours the painting—a scene from a Spanish novel—was finished. The onlookers burst into a thunder of handclapping. Delacroix looked up in surprise. So intense was his concentration that he had not been aware of the crowd around him.

This great French painter could not only work with remarkable



"Liberty Leading the People," the Louvre, Paris

speed, but could also paint in a bewildering variety of styles: canvases bathed in light, others whose darkness recalled Rembrandt, portraits, animals, flowers, vast battle scenes, quiet interiors. All glowed with colour, often in audacious combinations.

Delacroix opened the door for the modern school of painting. Van Gogh came to Paris for the sole purpose of seeing the master's "Pietà," which he copied and recopied. In Cézanne's studio the only important picture conceived by another artist was a copy Cézanne had made of a Delacroix. Manet, Renoir, Matisse, Degas, Rouault were all indebted to him. Picasso's famous "Guernica" is a direct descendant of the picture Delacroix painted as a protest against the massacre of 20,000 Greeks on the island of Chios.

Ferdinand Victor Eugène Delacroix was born in a Paris suburb in 1798, nine years after the French Revolution. As most of his biographers attest, his real father was

Prince Talleyrand, the master diplomat. (His nominal father was minister to Holland.) There was considerable artistic talent on his mother's side. It was the gift of a box of paints from an uncle which started him on his career. By the time Eugène was 16, both his parents had died and the family wealth had been frittered away. When he was older he wrote, "There is no situation worse than not knowing where one will eat next week."

A highly excitable young man, he once saw a painting he admired and ran half way across Paris to his attic room to get to his easel before the impression vanished. His first appearance before the public came when he was 24, at the Paris Salon. He was too poor to buy a frame for the eight-foot-wide painting he wanted to exhibit, and it might never have been hung if a kind benefactor had not provided the frame. The canvas, "Dante and Virgil," showed the two poets in hell surrounded by the writhing bodies of the damned; it is now in the Louvre.

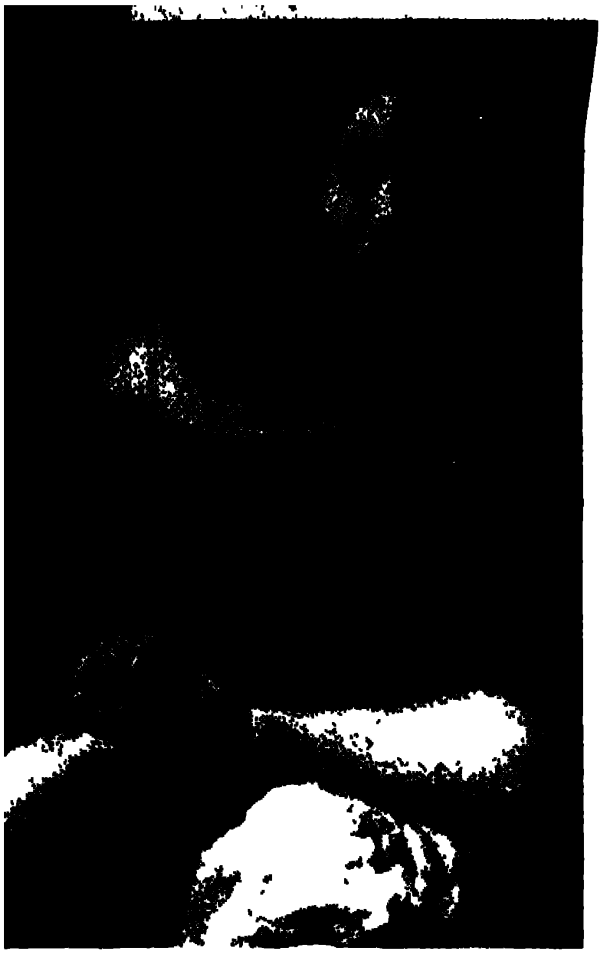
Delacroix rushed to the opening of the Salon to hear what people would say about his first picture. But instead of the praise he expected, he heard sneers and laughter. "A formless dauber," said one critic. "A charlatan!" cried another. Next day he bought the newspapers. Only one had a favourable word for him. Adolphe Thiers, later Minister of Commerce, said it was a beautiful painting, with here and there "a burst of talent." That saved the day for the young man. The adverse criticism was forgotten.

It was the beginning of an extraordinarily productive career. "Work is my only passion, but what a passion," he wrote. Awake at dawn, he breakfasted on a bit of bread, then painted without pause until late in the afternoon. Eventually, drained of emotion, he would read poetry to refresh himself.

In those days before the invention of the camera, painters were much in demand for recreating historical scenes. Delacroix lavished acres of canvas on these pages of history, with a passion for light and colour that was to make him immortal. "A painting should first and foremost be a feast for the eye," he said. And he was a master chef.

This speciality made him wealthy. The government was always in the market for the decoration of public buildings. From poverty, Delacroix went on to ease. He became one of the first painters in modern times to make a handsome living with his brush.

Genius has been described as an infinite capacity for taking pains. Delacroix worked for months on his "Massacre of Chios," then lugged all 143 square feet of it across Paris to the Salon three days before the official opening. The story goes that on his way home he looked in at an exhibition of the work of John Constable, the English landscape painter. Constable's handling of



Left: "Portrait of George Sand," Ordrupgaard Museum, Copenhagen

Below: "Portrait of Frédéric Chopin," the Louvre, Paris



clouds and the changing blues of the heavens came as a revelation to Delacroix. Realizing that the sky of his own picture was, in comparison, flat and uninteresting, he returned to the Salon and carried his unwieldy canvas back to his studio to paint an entirely new sky. Only when he was completely satisfied, two days later, did he make the return journey.

From the age of 22 he suffered from ill health. Chronic malaria and a throat ailment often confined him to his bed. Yet, though frail and sickly, soft-hearted and tender, he painted scenes of the greatest violence. His historical pictures were often of frightful carnage and slaughter. The "Massacre" horrified the public because of one detail: a baby suckling at the breast of a dead woman. But even in his goriest paintings his sensitive nature comes through. The figure of the dying workman in "Liberty Leading the People" has been described as one of the most moving in the history of art.

Delacroix was among the first to paint North African scenes. He spent six months there, went everywhere, sketchbook open, drawing people and scenes, gathering ideas and inspiration that were to last him all his days. In Algiers, he gained admission to a harem—for artistic purposes. Out of that visit

PHOTOGRAPHS: AGRACI

came his famous "Women of Algiers," considered by many critics to be his masterpiece.

He has another claim to immortality besides his paintings: he kept a diary, a detailed, sensitive, three-volume record of his life. As a document it has been ranked with the journal of Samuel Pepys. The great men and women of the period parade through his pages: Chopin, George Sand, Victor Hugo, Dumas, and the wife of Shelley.

Olive-skinned, with somewhat oriental eyes, his hair long and black almost to the day of his death, and with his small moustache, the painter was extremely attractive to women. They pursued him ardently, and he often allowed himself to be caught. His enduring love was the Baroness Joséphine de Forget; but for his ill health he would certainly have married her.

As Delacroix grew older, his throat ailment became worse. There were days when he could not utter a syllable. His housekeeper, Jenny, who had been with him 28 years, would stand guard at the door, barring all who might weaken his health or distract him from his painting. But Joséphine de Forget and his good friend Frédéric Chopin came and went as they pleased.

Once George Sand asked Delacroix to her home—"Come at midnight if you are not too much of a sleepyhead"—to hear Chopin play. The scene so impressed Delacroix that he painted it—the composer at the piano, the novelist standing near by listening. The picture eventually fell into the hands of a businessman who brutally cut it in half and sold the two portraits separately. One now hangs in the Louvre, the other in Copenhagen.

As Delacroix grew weaker, Jenny shut the door to everyone but the doctor. A member of the *Académie des Beaux-Arts* came to call. Delacroix, who had been rejected seven times before being elected to this august society, turned the man away. "They have insulted me enough," he told Jenny.

The honours he had longed for came to him late in life—too late. He had never been admitted into the inner circles of high society. Now he was showered with invitations. And though he had had recognition in abundance from the young, the old-line critics, almost to the end, would not accept him.

On August 13, 1863, at the age of 65, he died. One of his last remarks was, "Oh, if I get well, I will do wonderful things. My mind is bubbling with ideas." The final word, however, was spoken in the catalogue of the centennial exhibition of his paintings in Paris last year. "Eugène Delacroix," it said, "is one of France's national glories."

THERE's a new cigarette out with earplugs in each packet—for smokers who don't want to hear why they should give up smoking. —P. B.

Early to Bed...



Although not healthier or wealthier, the head of this household is certainly wiser

By Seymour Rothman

Did you ever climb into bed early for a good night's sleep, and wake up the next morning feeling on top of the world?

Neither did I. But it isn't because I haven't tried.

The other night, for example, my wife caught me yawning right in the middle of a television hero gunning down a couple of strangers, and announced that what I needed was more rest and why didn't I have a nice warm bath and go to bed early for a change. I agreed and started up the stairs.

"I'm not sure there'll be enough hot water," she called. "I just put the last load of washing in."

"I'll take a cool shower," I compromised. "Where are my clean pyjamas?"

"They're in the last load," she said.

I got into bed and was just dropping off when I heard footsteps at the door. The door opened slowly. "Are you asleep?" whispered the wife. "No," I confessed. "Don't you feel well?" "I feel fine."

She came over and felt my forehead.

"It isn't hot," she announced.

"Why should it be?" I growled. "I just felt like going to bed. It was your idea."

"Try and get some rest," she whispered, and tiptoed out. By then

Condensed from Toledo Blade

I couldn't close my eyes. I decided to read. When I couldn't find anything at the bedside, I made my way to the bathroom where reading matter has a way of accumulating.

Downstairs old eagle-ears heard me. "Darling," she called, "what are you doing in the bathroom?"

I avoided the chance to shock the whole family. "Looking for something to read," I said.

"Save your eyes. Sleep," she called sweetly. I read for a while and finally fell asleep. I slept like a newborn babe for all of six minutes—and then my wife came to bed.

"Do you mind if I turn the light on for a second?" she whispered. "I thought you'd be asleep by now."

I pulled the sheet over my head. But I didn't even have time to fall asleep when the wife announced: "You're snoring."

"How can I be snoring?" I challenged. "I'm not even sleeping.'

"You've got ways. Turn over."

About this time we were interrupted by the pitter-patter of little feet. It was Betty. "I'm going to sleep in your bed," she announced.

"Don't bet your pocket money on it," I said. "Just till I go to sleep, Daddy. I'll be quiet." "O.K. Just till you go to sleep." "Can I turn on the radio?" "Of course not." "I always fall asleep with the radio on." "This will be an historic exception." "What does that mean?" "It means 'No!' "

I picked Betty up and deposited her in her own bed. Then I went downstairs and stretched out on the divan in the study.

Two minutes—and my wife appeared. "I heard you downstairs," she said. "Are you ill?"

"If I am, I hope it's sleeping sickness," I growled.

"Good night," she said, sounding a little hurt.

She had no sooner walked out than Betty walked in. "Betty," I said sharply, "go to sleep."

"I will, in here," she said.

"This divan is too small."

"No it isn't," she insisted, squeezing herself between me and the wall. "See?"

Seconds later she was asleep and I was falling out of bed.

I tiptoed upstairs, climbed into Betty's bed and fell asleep—finally.

Then there was Betty again. "Daddy," she demanded. "What are you doing in my bed? Get out of my bed. I want to sleep in it."

I got out. She got in. I was just leaving her room when my wife reappeared.

"Now what!" I demanded. "This carpet won't last out the night. Why don't you go to sleep? I'm going to have some coffee."

Back downstairs, I was dozing off in the study when I became aware of a new figure on the scene. It was Bobby. "Is there a pencil in here?" he asked. I sat up and turned on the light. "What on earth do you want with a pencil at this hour?" "I want to write a note." "You're leaving home—I hope?" "No, it's about

something else. I'll forget it by morning." My wife appeared just in time to chase Bobby back to his room.

"This is silly," she announced, turning to me. "You come right back upstairs and go to sleep—in your own bed."

"I haven't worked so hard since I was in the army. That bed will feel good," I agreed.

Upstairs my wife fluffed my pillow and straightened the bedclothes. "Now," she said. "I'm going to bring you a glass of warm milk."

"Isn't there any beer?"

"At this hour?"

I looked at my watch—it was one o'clock.

I got up, went downstairs, and opened a can of beer.

Master Plan

OUR 11-YEAR-OLD Boy Scout returned from an overnight winter camping trip cold, sleepy and reeking of wood smoke. As he was telling us about the trip, he mentioned that, when it started to snow, the scoutmaster had retired to a near-by farmhouse, saying he had trouble with his teeth.

"What was the matter with his teeth?" my wife asked.

"I suppose they were chattering," said our son. —H. L. K.

Cold War

ON AN autumn inspection tour of a cattle ranch the owner noticed that the kitchen building at one of the cow camps was in need of repair. He sent a load of wooden tiles with instructions to the cowboys to put the outside wall on in their spare time.

The boys postponed the unpleasant task until cold weather had arrived. Then, putting their heads together, they worked out how to do the job with the least exposure to the nasty weather. They now have what is probably the only cooking shed in the West that is tiled on the *inside*.

—S. L. B.

AS AN example of modern luxury living, we submit the manner in which Harvey Spero of Milwaukee fetches his newspaper on Sunday mornings in winter. Putting on a dressing-gown over his pyjamas, Spero gets into his car in the garage, presses the button that opens the garage door electrically, backs down his driveway to the delivery box, runs down an electric window, fishes the paper out of the box, changes to forward gear and drives back into his garage. —D. K. G.

One of the best counter-espionage weapons is a camera with a telephoto lens. Here is the story of the photographs that exposed an enemy agent at work



Russian spy Martynov waiting at his Madison Avenue rendezvous

Snapshots of a Russian Spy

By Karl Detzer

THE BIG man in a dark-blue overcoat and grey hat stood quietly that November afternoon, backed against a wall at the north-east corner of New York's Madison Avenue and 80th Street. No passer-by gave him a second look; but from under the turned-down brim of his hat he eyed every man who approached.

His name was Maksim Martynov and he was a member of the Soviet group at the U.N. Military Staff Committee. He was waiting for a U.S. Army colonel who, he hoped, had something to sell him. Martynov glanced at his watch. The colonel was late.

Although passing citizens did not notice him, the Russian was not unwatched. FBI agents with field-glasses in hidden look-outs studied his every



He consults his watch nervously



"Colonel" Peck arrives in taxi for the meeting

move. Despite the failing light, they photographed him at a distance of more than 100 feet through powerful telescopic lenses.

The case began one August day in 1954 at American Headquarters in West Berlin. Colonel John Hasty* got a telephone call from a Soviet officer with whom he had dined two weeks earlier. The Russian congratulated him on his forthcoming return home, suggested they meet for lunch in East Berlin before he left, and also suggested they might meet again later in New York. The colonel reported the invitation, and intelligence officers told him to accept. Hasty met the Russian at the Unknown Soldier's Tomb in the Soviet Sector and was driven to a private house. Luncheon was waiting. Also present was a Russian civilian who spoke American; he explained that he had once served in Washington.

The meal was pleasant and cordial. As it ended, the host discovered that there was no coffee and, saying that he would get some, left the house. The civilian then made guarded but unmistakable suggestions that Hasty might find it profitable to continue the conversation at a later date. When Hasty did

* Names of Americans are disguised for security reasons.

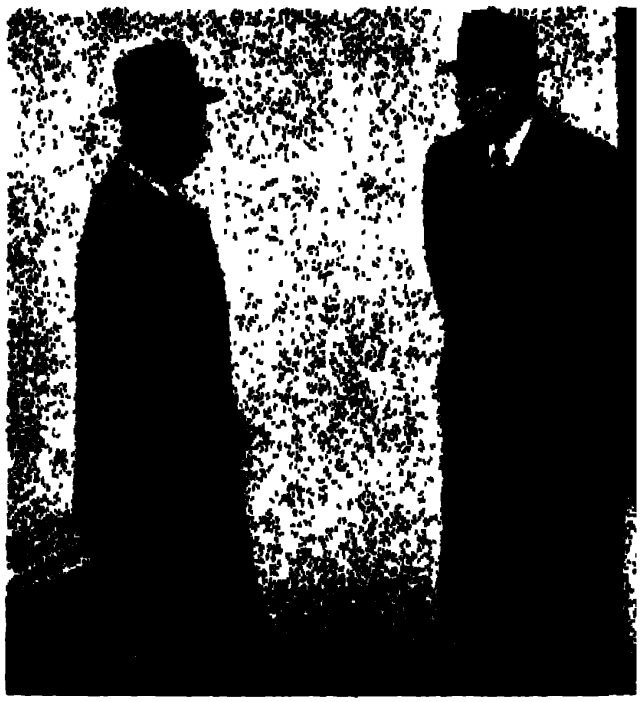
not back away from the suggestions, the Russian followed through.

"If I'm able to get to New York," he said, "let us meet at the north-east corner of Madison Avenue and 86th Street at 4 p.m. on October 15. If you can't make that, perhaps the 25th." He also gave six alternative dates. Hasty was to wear civilian clothes and be alone. "If I don't meet you, someone else will," the Russian said. "After you have stood a few minutes, look at your watch. Someone will ask, 'Didn't we meet in Spechstrasse, Berlin?' You reply, 'Yes, I lived at Number 19.' Then you can talk freely.. We will pay your expenses, and also of course, for any information."

That night Hasty reported the conversation to intelligence officers. As soon as he arrived in the United States, FBI agents questioned him at length, asking about his boyhood, family, friends, hobbies. "You need not stay in New York," they said. "One of us will impersonate you. That's why we've been studying you so carefully."



Spy Martynov eyes Peck, not sure . . .



Peck swings round and walks past Martynov again; neither speaks

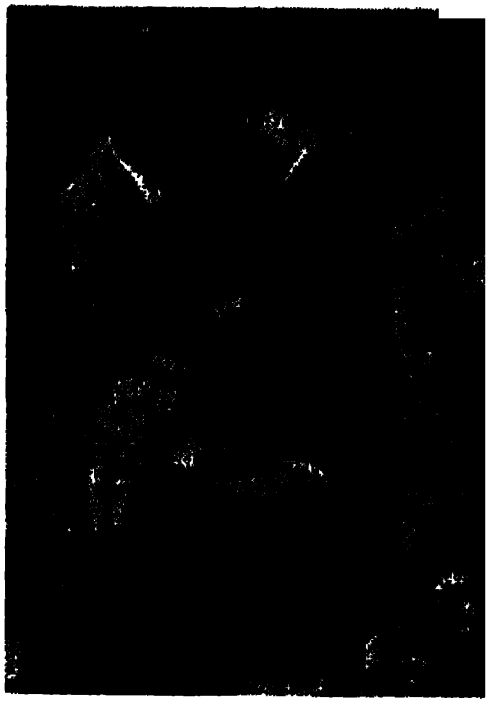
The FBI found a good match for Hasty in agent Fred Peck. He had the same height and weight, the same colour hair and eyes, same ruddy complexion, long nose and receding chin. He was a few years younger and lacked Hasty's small, military moustache. A make-up man gave him both age and moustache, and Fred Peck bought a tweed jacket of the kind Hasty wore.

On October 15, the date for the

first meeting, Peck did not appear; he was still doing his homework, learning to walk and talk like Colonel Hasty. But other agents covered the neighbourhood. No stranger took up a position at the north-east corner. But several men, recognized by the FBI as Soviet overcoat arrived at the corner at 3.56 p.m., backed against the wall and waited. Watching agents recognized him as a Soviet U.N. staff member; one said, "This must be the day. That's Maksim Martynov." The man was nervous, glancing at his watch repeatedly.



Martynov eyes Peck against the wall



Spy contact is established as Martynov says, "My name is Schultz"

U.N. staff members, strolled about apparently looking over the situation.

By October 25, the date of the second rendezvous, Peck was ready. He went to the appointed spot, waited, glanced at his watch, continued to wait. No one approached. But again two Russians took a leisurely stroll up and down, glancing at Peck each time they passed.

On November 15, the third date, the tall Russian in the dark-blue

At 4.05, Martynov stiffened as a taxi stopped.

Peck got out, set his shoulders at a military angle, walked towards the waiting Russian—and past him. Martynov watched closely. When Peck swung round and came back, the Communist nearly spoke, then thought better of it.

Peck now paused a dozen feet from Martynov, and stood there for several minutes. Then he stepped

forward and looked at his wristwatch. In his hand he carried a packet that could have contained documents. Martynov eyed it; he decided to take a chance. Approaching Peck he began: "Colonel, didn't we meet in Spechstrasse, Berlin?"

"Yes, I lived at Number 19," Peck replied. Martynov smiled and held out his hand. "My name is Schultz," he said. He suggested that they went for a drive, but Peck, not wanting to outdistance FBI men who would be following, said it would be better to walk in near-by Central Park.

Martynov was loaded with questions about military matters. Peck was prepared with carefully learned wrong answers to hundreds of questions, truthful answers to others. The Russian seemed satisfied, but he wanted more specific data and Peck promised to bring it to their next meeting.

"Your expense is heavy," the Communist said, slipping him a roll of 25 ten-dollar notes. They would meet at the same time and place on January 15.

Peck was there on time, with a briefcase. He again suggested a walk in Central Park, but this time Martynov refused. Instead they went to a quiet hotel bar and sat in a corner booth. Other patrons strolled in to distant tables and the bar.

"Speak low," the Russian warned. "Did you get what I need?"

"In here." Peck touched the briefcase.

"Give it to me." But Peck delayed. More patrons were coming in. Martynov looked at them and said suddenly, "I don't like this place. Let us leave at once!"

"This is for you," Peck said, setting the briefcase on the table. It was a signal. Two patrons moved forward. They confronted Martynov, identified themselves as FBI men, and placed the Russian under arrest.

"I am a diplomat!" the spy cried. "I have immunity!"

When Martynov produced his diplomatic credentials, there was nothing to do but release him. Reluctantly the agents watched him take a bus in the direction of Soviet Delegation headquarters. On February 21, the State Department declared him *persona non grata* and he left the country five days afterwards.

The long-distance camera is an effective weapon in the FBI arsenal, and many agents are sharpshooters with the lens as well as the pistol. In the last ten years more than 30 Soviet officials enjoying diplomatic immunity and American hospitality have been caught in acts of espionage or similar activities far beyond the scope of their official duties. The telephoto lens helped to trap several of them. Most of the photographs were taken without the knowledge of the subjects, who rarely smile for this particular candid camera.

Towards More Picturesque Speech

Picture Writing. Little hamlets going to sleep, window by window (Mary Dorsey) . . . A plane winked its way into the airport (Marjorie Campbell) . . . Revolving doors chopping a crowd into people (William Collar) . . . A river stapled with bridges (Ed Becker)

Word Games. Head cold: Rheum at the top (Jerome Beatty) . . . Tangerine: Loose-leaf orange (*D.M.R.*) . . . Cactus: defence plant (Jack Herbert) . . . Unimpeachable source: One who started the rumour (Al Martino)

Patter. Life with her was like being in a phone-box with an open umbrella —no matter which way you turned, you got it in the eye (Jean Kerr) . . . There's a beauty in a stockbroker's office whose measurements are 36¼-25½-35⅛ (Johnny Carson) . . . Then there's the Cleopatra cocktail—two drinks and you Caesar (Tom Hughes) . . . Teenagers are like aeroplanes. You only hear about the ones that crash (AJ)

Howdy, Pardner! Nothing is as sure as shootin' in a Western (Maurice Seitter) . . . Title for a new Western series: "Tales of Whoa" (Denise Lor) . . . Perhaps these Westerns should be live—including the ammunition (Earl Wilson) . . . An adult Western is one in which the pretty gal no longer heads off our hero at the pass (Wanda Cunningham) . . . Most television Westerns end in a four-gun conclusion (C. E. Kitchen)

Sign Lines. In Scandinavian restaurant in New York: "Eat like a Norse" . . . On skindiver's boat: "Our business is going under" (Mrs. Albert Grinnell) . . . In insurance broker's office: "Honestly, it's the best policy" (E. H Brindle) . . . In girl's gym: "Build a better spouse trap" (Doug McMann) . . . At filling station on road leaving Las Vegas: Free aspirin and tender sympathy (Mrs. R. V. Smiley) . . . In window of dramatic school: "We cure hams" (*The English Digest*) . . . In bookshop: "Curdle up with a good murder mystery"

Facts of Life. The accent may be on youth, but the stress is still on the parents (Sidney Brody) . . . The most fortunate thing about small boys is that they are washable (F. P Jones)

Overheard. Sweet young thing at perfume counter: "But I don't want to surrender—just negotiate" (*Gaze*)

On Thin Ice. Among my favourite winter sports are girls who figure-skate in shorts (Harold Coffin) . . . Skating's easy to learn. Most people pick it up in about 12 sittings (Bob Goddard) . . . Nothing venture, nothing sprained (Francis Walsh)

Car-toons. Comment upon viewing a neighbour's new car: "How status-fying" (Mrs. Mark Murry) . . . Then there's the new car for city driving—the stationary wagon (Arnold Glasow)



The Grizzly Bear, Vanishing Giant of the North

By Frank Dufresne

Though every other animal gives him the right of way, the Grizzly Bear is not at all mellowed by the courtesy. He remains the moodiest creature in the wilderness, grumpy and belligerent. Life, to him, is definitely on the sour side.

Once, on Admiralty Island in

Condensed from Alaska Sportsman

south-eastern Alaska, where these huge predators have attained their largest concentration on earth, my binoculars framed a shaggy old male bear standing in a shallow stream which was jammed bank to bank with spawning salmon. His belly sagged with the fish he had gorged. When his digestive juices made room for another he had only to lower open jaws among the thrashing salmon. The thought came to me that if I was ever going to observe one of these crotchety brutes in a contented frame of mind this might be the time.

I couldn't have been more mistaken. Behind the bear on a gravel bar a family of bald eagles haggled over rag-tags of salmon he had discarded. For a while he glowered at the scavengers, his lips curling in mounting irritation. Then abruptly the morose giant erupted out of the river in a geyser of spray and began bashing right and left among the eagles. Easily avoiding their lumbering adversary, the birds hopped into the air and flapped away.

But the grizzly was by no means mollified. Sidling to a rotted stump at the water's edge, he snuffled petulantly, and I saw the long hairs along his shoulder hump spring erect. Suddenly he fetched the stump a clout that sent a 50-pound chunk flying through the air. Huffing and puffing as though in mortal combat, he cuffed the stump until there was nothing left of it.

I turned to my companion, a homesteader of the area, for an explanation. He shrugged his shoulders. "Seen 'em do things like that lots of times," he grunted. Why? "That grizzly's mad," he declared, "because he ain't got nothing to be mad about."

His own kind probably gives the grizzly more trouble than any other wild beast. A male bear seldom reaches maturity without being maimed in savage fights. On the Alaska Peninsula overlooking the Bering Sea I once witnessed a bout between two half-ton gladiators over the affections of a female who watched as her burly lovers rose to their hind feet, stood breast to breast and belaboured each other with fang and claw. When at last the vanquished suitor staggered away, leaving a bloody trail, the victor trudged towards the female to claim his reward. He had paid dearly for the pleasure. His lower jaw hung broken and useless.

Survivors of these sanguinary contests sometimes plod about the tundra like punch-drunk prizefighters, their massive heads covered with scar tissue. Teeth are shattered against the skulls of their opponents. Cavities develop, raw nerves are exposed and toothaches plague them for the rest of their days. Bad tempered? Who wouldn't be?

FRANK DUFRESNE, now retired, travelled widely in Alaska making surveys which formed the basis of laws to preserve the territory's wildlife resources.

The grizzly has reigned over the animal kingdom in the western half of North America since the Ice Age. On Kodiak Island and adjacent Alaska Peninsula the male of the sub-species known as the "brown bear" is the largest of all land carnivores in the world and sometimes exceeds half a ton in weight.

The grizzly is one of the most courageous and intelligent of beasts, as well as the most unpredictable. One afternoon I was crouched, camera in hand, behind some fallen logs overlooking a dry Alaskan creek bed much used by travelling bears. A huge grizzly soon appeared. As he ambled by in front of my hide he apparently caught my scent, for his gait stiffened and I saw the hairs on his neck rise slightly, then fall again. He gave no other sign, not even turning his head or quickening his pace as he moved round a bend and out of sight. But half an hour later as I rose and turned to leave the hide I found myself looking square into his eyes —he had circled, padded soundlessly into position behind my back and was watching me in dead silence. I saw no sign of anger: he had decided I was harmless. He had outwitted me and turned the tables, and now his upraised ears and cocked head were asking the question: "Well, how do *you* like being spied on?"

When the grizzly comes out of his winter den among the snowbound crags, his stomach shrunken by months of fasting, he craves the spring tonic found in skunk-cabbage bulbs and hellebore shoots. But soon his carnivorous appetite demands meat, and his diet changes to ground squirrels and marmots, scooped from their runways and popped down like peanuts. Then he starts demonstrating his amazing skill in stalking and killing deer, caribou, even mountain sheep and goats.

Moose venison is a special delicacy to the grizzly, and a sportsman who leaves one of these trophies unattended overnight is asking for trouble. It was dusk when a sportsman friend of mine shot his bull. He had barely time to field-dress (disembowel) the 1,500-pound animal and walk a mile back to his riverbank camp before darkness closed in. Next morning, as he approached the bull, he was struck down as though by a bolt of lightning. The hunter dimly remembers the grizzly seizing him in its jaws and flailing him about "like a terrier shaking a rag doll." Left for dead by the grizzly—his forearm crunched and his scalp all but torn away—he managed to reel back to his partner in camp. From his hospital bed the man made a surprising statement. He said he didn't blame the bear. "He was only protecting what he thought belonged to him," he explained.

At birth the grizzly is a hairless little creature weighing only about 24 ounces, the size of a skinned

rabbit. He is born in the darkness of the winter den while his mother is in a sort of twilight sleep—not a true hibernation because her body temperature remains fairly high. She may have one to four cubs. When she leads them out into the May sunshine several months later, they have become roly-poly balls of brown fur with needle-sharp teeth, claws and tempers. Playful wrestling bouts among them have a way of turning into squalling slogging matches, followed by wails of pain as the mother cuffs them apart.

All that summer Mrs. Grizzly is a devoted parent. She even takes the children, now grown to 300 or 400 pounds each, to den with her that autumn. But with the arrival of the second spring they come to the crossroads. The she-bear's oestrus period, which occurs only once in two years, spreads its musky aroma for incredibly long distances to attract the male bears. In the roaring elimination bouts preceding her two weeks' honeymoon with the victor, her yearlings are dispersed to begin a life of their own.

This is probably the most carefree time they will ever know. Andy Simons, a famous Alaska guide, and I once witnessed one of these "teenagers" balancing himself like a tightrope walker on the crumbling edge of a snow cornice high over our heads. Below him a melting snow chute sloped steeply down to the green tundra where Andy and I stood. The young bear leaped off the rim in a bellywhopper dive and came scooting down the slippery incline like a boy on a toboggan. Accelerating to dizzy speed, he rolled end over end to a grand finish no more than a few yards away. Without so much as a glance in our direction the young grizzly picked himself up to do it all over again.

Andy showed no surprise. "I've seen 'em do crazier stunts than that," he said. "I've watched a grizzly swim across a lake, touch shore on the other side and swim right back again. I've had one follow my tracks for miles. He wasn't angry, just curious. I've had one poke his head inside my tent and slobber on my face." The veteran guide added, "If you know what a grizzly's going to do next, you know more than he does."

Today the grizzly bear's fate hangs in the balance, for he is North America's No. 1 hunting trophy. He has been pushed from one wilderness pocket to the next until there are at present no more than 20,000 left in Alaska, and perhaps not more than 500 in the other western States. The latter are mostly in the national parks in Montana, Idaho and Wyoming, where tourists can sometimes see the once proud and respected beasts grubbing in garbage heaps. Many sub-species have dropped into oblivion. The Great Golden Bear of California is extinct.

The cruellest blow dealt to the future of the big bears in recent

years is the growing practice of hunting by aeroplanes. Small, manoeuvrable planes spot the helpless giants in the open, then land close by while the "sportsman" makes his kill. There have been reports of aircraft working in "teams," one plane landing the hunters near their quarry while the other stays aloft, keeping the grizzly in sight and directing the hunting party by radio. The bear hasn't the slimmest chance.

Wildlife protection groups from all over the world are pleading with Alaska to save the vanishing giants. The Alaska Department of Fish and Game has responded by declaring one of its 26 game districts out of bounds to air hunting, and by juggling the spring-season openings to minimize the use of ski-equipped planes.

But the grizzly needs more protection from the increasing number of hunters entering the Alaskan wilderness via new highways and airways. Alaska must outlaw hunting by aircraft; it must pass and enforce stricter hunting laws, or there will be no big bears to hunt.

One reason why many grizzlies are ill-tempered is that they carry hunters' bullets in their bodies or suffer the agony of festering wounds. Take the case of "Old Groaner." This huge bear, who patrolled the Unuk River in southeastern Alaska, gave vent to such blood-curdling roars that few anglers dared visit the wild valley for its wonderful salmon and trout fishing. At the first taint of human odour the bear would redouble its outbursts.

Word spread that "Old Groaner" was a maniac bear, a man-killer, and it became a challenge among local hunters to see who could slay the dreaded monster. Finally the deed was accomplished, and the massive skull was placed in a Ketchikan sporting-goods store window for all to admire. But onlookers were strangely silent as they noted that the cranium was grotesquely misshapen, fractured and knit in a hideous deformation. The secret of the man-hating grizzly was out at last: "Old Groaner" had been living for years with a rifle slug embedded in his brain.

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Stumbling Block

THE HEAD of an electronics company was being interviewed. "How do you stumble upon all these new electronic products?" asked the newspaper reporter. Pointing to a huge research building on the other side of the street, the executive smiled and replied, "See that over there? We maintain a Stumbling Department for that very purpose." —D. B.

Modern Miracles of the Master-Builders·

A round-the-globe report on some of today's revolutionary building methods

By Ira Wolfert

Rudyard Kipling once wrote, "How very little, since things were made, Things have altered in the building trade." He should see what builders are doing today! Everywhere you look you can see new kinds of buildings, new ways of putting them up (or down), new tools at work.

To observe some of the resourceful methods and devices being used, I have stood on pavements all over Europe, Canada and the United States. For wherever wages are rising and skilled labour is becoming scarce, necessity is mothering new inventiveness.

In Coventry, England, I saw an entire 17-storey block of flats built at street level. I watched with Austrian-born, Israeli-reared Felix Adler, chief structural engineer for one of Britain's largest contractors, Richard Costain Ltd., developers of the Jackblock method of building skyscrapers.

At first it seemed conventional enough while they dug a hole and put a foundation in it. But then they put 40 hydraulic jacks on top of the foundation and built the roof on top of them. After that, they jacked the roof up out of the hole and built the 17th storey under it, then jacked

Condensed from Building/Design

that up and put the 16th storey under that. So it went from first to last, or was it from last to first? The entire building was, as it were, extruded from a factory at street level, with each floor finished, complete with paint and lights, before it was jacked up out of reach.

One man controlled the lifting by synchronizing the upward thrust of the jacks from a basement console that regulated the flow of hydraulic fluid. Since he was in the basement he could not, of course, see the building, but he watched the bob on a plumb line centred over a dot on top of the console. As long as the point of the bob remained aimed on the dot, he knew the building was going straight up.

Now the same method may be used for an 18-storey building in Brussels, and plans for a 38-storey building in The Hague are under discussion. "Our timetable calls for finishing the Brussels building in one year," said Adler. "If done conventionally, the job could take two." Perhaps this last-things-first way of doing things has a limit, but Adler hasn't found it yet.

In Geneva, passers-by paid little attention to a huge, circular, floorless garage going up in their midst until it began to go down to become a foundation for other buildings.

As a foundation, the building had to fit its hole as snugly as a nail in a plank. So, the designers had to let the building make its own hole as it went down, the way a nail does. But they couldn't, of course, hammer the building in. They couldn't even use the new technique of driving piling with sound waves (the pile, vibrating in tune, shudders loose from the grip of friction and dances its way down). Sound waves strong enough to break the grip of friction would crack the building. If it were to sink at all, it would have to be of its own weight as they excavated inside it.

"That's impossible," an engineer said when I told him about it.

The trick was to give the hole which the building was making a frictionless wall. This was done with an extraordinary new method of using chemical "mud," poured into a space which the builders created by making the bottom edge of the garage's walls four inches wider than the rest. The entire garage was built at street level, the upper floors being added only as the lower floors descended out of sight. Some 90 feet down, they stopped pumping mud. Mortar was then injected to expel the mud, and friction asserted itself, stopping any further sinking. The seven-storey structure was at last where it was supposed to be, to provide parking for 530 cars and hold up seven other commercial buildings.

This new method of using chemical "mud" was developed by Dr. Hans Lorenz, of the Technical University of West Berlin. This particular mud is from the same family of chemicals as the bentonite mud

which oilmen use to keep wells from caving in. When in motion, it behaves like a liquid; but when it has to stand still it acts like a solid.

Under the banners of Lorenz-licensed companies, frictionless mud is now flowing throughout western Europe. The Italian firm of ELSE has combined it with a remarkable new deep-trenching, precision power-shovel that digs trenches by lifting earth and rock straight up out of the ground as an elevator might. The mud keeps the trench walls from collapsing while the shovel is cutting them so board-straight that they can be used as forms in which to pour concrete.

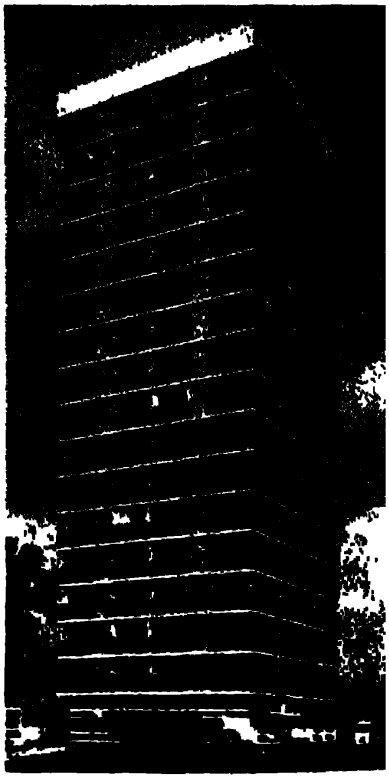
In Paris I saw ELSE-Lorenz build a foundation for a new block of luxury flats. The site was surrounded by old buildings. Since the new building would stand higher than they did, its foundations had to go deeper.

Normally, it could have been done only with underpinning to keep the earth beneath the old buildings from sliding into the excavation. Instead, Dr. Lorenz's mud, poured in simultaneously as the shovel dug a trench around the site, kept the earth from sliding.

Concrete was then pumped beneath the mud, displacing it. When the concrete hardened in the trench the builders excavated the area. The concrete became the outside walls of the foundation and basement. "Putting a new building in among







Left: the building rising up from the three-storey factory beneath. Above: in the jacking chamber, precast concrete blocks are inserted as the whole structure is raised at the rate of one inch every three minutes

old ones used to be tough work," a workman told me. "Now it's sweet, like dropping cake into a box."

More significant in the long run than what is going on in the basement may be what is happening on the roof. All over the Western world new warehouses, air terminals, auditoriums, exhibition halls and churches are rising with nothing inside them but space. There are no pillars, no posts. The roofs are without visible means of support.

More responsible than anybody else for this development is a round, twinkling-eyed 68-year-old American known to his friends, students and legions of disciples as "Bucky." He is R. Buckminster Fuller, now of Southern Illinois University. Architect, engineer, designer, philosopher—the only thing Fuller seems to have stuck to consistently throughout his working life is being a genius. In recent years he has devoted most of his energies to leading what *Consulting Engineer* calls "a one-man uprising against conventional structural design."

According to Fuller, his attack on conventional roofs takes off from this well-known physical fact: A man who can easily hold a pole upright on the palm of his hand will need more strength when he tries to hold the same pole out on a slant or horizontally—as roofs have been held traditionally. The nearer the horizontal the pole gets the more strength is needed to support it.

What Fuller has done, then, is to make his structure a domed one composed of many parts, each supporting the other in a position as far from the horizontal as possible. Fuller calls it the geodesic dome. I saw vast domes patterned after Fuller's work protecting the radars of the Distant Early Warning Line across Canada. They were not much heavier than balloons; yet they were strong enough to shelter delicate electronic mechanisms from 165-m.p.h. winds.

Fuller himself has constructed roofs and supporting walls of members in patterns so intricate that the Museum of Modern Art in New York has exhibited them like paintings by Picasso.

The concepts which Fuller has evolved are going off in all kinds of surprising directions in the hands of other architects and engineers. In New York I spoke to consulting engineer Thomas Kavanagh, of Praeger - Kavanagh - Waterbury, whose 18½-acre inverted dome for a radio telescope in Puerto Rico has just been completed His firm is also the consultant on the blueprints for a plastic-covered roof for the new air-conditioned sports stadium in Houston, Texas. During the designing of this roof, baseball players were hired to hit fly balls as high as they could, while surveying instruments measured the altitude This determined that the roof would have to be 260 feet high at the centre. And, without a single pillar or post to hold it up, it would have to

withstand the tornadoes and hurricanes that sometimes afflict Texas. A model of the final design was sent to an aircraft manufacturer in St. Louis to be tested in a wind tunnel. The engineers wanted to make sure it wouldn't fly away either with or from the stadium!

In Pasadena, Texas, I watched a roof being put on a big warehouse of the Olin Mathieson Chemical Corporation. Instead of a crane, a helicopter was lifting the roof's 58-foot-long arch sections and putting them delicately and precisely into place. It was like watching some strange bird fluttering back and forth to build a vast nest, one giant twig at a time. The helicopter accomplished in half a day what would have taken three weeks by conventional methods and saved 10,000 dollars (Rs. 47,500) on the 200,000 dollar (Rs. 9·5 lakhs) job.

Not since the first skyscrapers, the first giant suspension bridges, the first huge dams has there been such a revolution in the building trade.

Party Line

WE HAD promised our daughter her own telephone for her 14th birthday. Shortly before its installation, there were elaborate plans afoot among her friends. They stored up pickles, sardines and biscuits in her room. And they brought hair curlers, playing cards and knitting to occupy those who would not be on the phone.

Then the big day arrived. At four o'clock our daughter thundered in from school with three excited friends, followed a few minutes later by four more. After a brief lull, three more arrived. Eventually, the last child dashed upstairs.

All this confusion was suddenly followed by a great silence. I went upstairs to investigate and found a roomful of surprised and wide-eyed faces. After a distressed pause my daughter said softly, "There's nobody to phone—we're all here." —Contributed by Jean George

Self-Starters

ONE EXTREMELY cold night, a man put a rug over the front of his car. When it started first go the next morning, he congratulated himself. Then came the realization—the car had its engine at the rear. —AP

A MOTORIST stopped to help a woman driver who had stalled on a main road. He found her taking sand out of the boot of her car and sprinkling it round the front wheels. "It ought to go under the back wheels," he said. Sneering at his stupidity, she replied, "The back wheels go round all right. It's the front wheels that won't turn." —*M.T.*



A living legend in her country of Brazil, Eunice Weaver has saved more than 30,000 children from a fearful fate

Angel of the *Lázaros*

By Virginia Prewett

The Brazilian rancher stood straddle-legged on the bank of the Amazon River tributary, his gun loosely holstered, his sunburned face grim. Over the years, he and the half-dozen men who stood near by had defied the lawless guns-for-hire of the cattle barons, the perils of the jaguar-haunted forests and the rocky uplands. On that day in 1938 they were girded for a new battle

In distant Rio de Janeiro, plans had been announced to establish in their region a shelter for children of lepers. The very word "leprosy" made these men uneasy, with its echoes of the ancient cry, "Unclean!"

Round a bend in the river came a boat carrying the president of the *Federação das Sociedades de Assistência aos Lázaros e Defesa Contra a Lepra* (Federation of Societies to Aid Lepers and Fight Leprosy). The boat pulled in, the president stepped ashore, marched up to the leader of the men and looked him in the eye. Disconcerted, he retreated a step. This president, this enemy,

Condensed from Latin American Report

was a young woman, a very pretty one, and her black eyes snapped in defiance.

Nevertheless, he said gruffly that he and his friends would tolerate no home for *lázaros'* (lepers') children in this area. "We'll burn it down!"

"If you do, we'll build it right back up again," she retorted. She went on to explain something about leprosy (Hansen's disease): that it is not an inherited disease passed on inevitably from parent to child, but a bacteria-caused infection usually associated with a history of prolonged contact, often beginning in childhood. She proposed to take disease-free children away from contagion and give them a chance to grow into healthy adults.

"But there are no lepers here," the man said.

"Bring canoes and come with me," she replied. "Within a couple of days I'll show you 50 families who have been driven into hiding by the disgrace of their illness. I'll show you a hundred children who could be saved—who *will* be saved!"

Two months later, with the children's home under construction, the grizzled rancher said, "She was so young and pretty, and so mad, I just had to give in."

This graceful, flashing-eyed woman named Eunice Weaver has confounded men far more formidable than the ranchers. Provincial governors, leaders of industry, even presidents of Brazil have been forced to heed her words about this, the nation's most appalling health problem. She goaded and eventually led the women of Brazil in a campaign that resulted in the construction of 30 shelters in 21 states and two territories. Largely because of her federation's work, Brazil's ratio of Hansen's disease dropped from four per 1,000 population in 1931 to one and a half per 1,000 in 1961. Her methods have been studied and adopted by most of the nations afflicted with the problem. If their records of accomplishment do not match Brazil's, it is only because they do not have Eunice Weaver to lead them.

The daughter of a father of Swiss descent and a Brazilian mother, Eunice Gabbi grew up on a *fazenda,* or farm, in Rio Grande do Sul State. Ragged bands of leprous outcasts, stoned by other beggars to keep them moving, roved the countryside crying, "Alms, for the love of God!" When these pitiful cries were heard approaching, the custom was to place food outside the *fazenda* walls and close the gate.

On a spring day in 1916, when her aunt put out food, nine-year-old Eunice went with her—and looked full into the face of horror. There stood half a dozen creatures hardly recognizable as human: lepers with the characteristically thickened flesh and distorted features, some with crippling deformities. After a moment of shock, Eunice found herself looking, irresistibly, into another

pair of eyes. She did not see the bloated face, for the grieving eyes somehow were familiar.

"Rosa?" her aunt whispered.

Tears came into the eyes looking back at them. Rosa Fernandes was a neighbour's daughter believed to have committed suicide by drowning. Now she revealed that when she discovered she had Hansen's disease she had faked the drowning and disappeared to join her kind.

The band of outcasts moved on down the road. "God has cursed them," said the aunt, pronouncing the age-old doom. "There is nothing we can do." But from that moment Eunice saw these sufferers in a new light—as human beings.

Not long after, her family sent her to a Methodist mission school in the town of Uruguaiana. There a young American teacher-missionary, Dr. Anderson Weaver, persuaded her that God had not cursed the leper, that God loved the sick man no less than the well. Then, after a year, Dr. Weaver's wife died and he was transferred to another mission school.

Ten years later, in 1927, Eunice and Dr. Weaver met again. She was then a beautiful young woman, teaching preventive medicine in the bustling city of São Paulo. They were married shortly afterwards. The two became a remarkable team. She was the extrovert who possessed the thrust to drive for a goal. He was quiet and gentle, her refuge and renewal in times of discouragement.

In 1929 Dr. Weaver was invited to teach on the staff of a "floating university," a ship that was to make a world tour under the sponsorship of New York University. In Hawaii Eunice visited the leprosarium on Molokai where Father Damien had worked. She learned how he had taken healthy children from infected parents and brought them up free of disease. In Calcutta and in the Philippine Islands she observed the work of pioneering doctors who had set up model villages for victims of Hansen's disease and were treating them as human beings rather than as condemned outcasts. By the time she returned to Brazil, she knew what she herself could do.

Her plan was to save healthy children of leprous parents from contamination. She decided to set up a nationwide network of homes—not called orphanages, for these children were not orphans, but called *Educandários*, or houses of education. Since such a plan required money and organization, Eunice began to write and speak, addressing herself primarily to Brazil's well-to-do women.

She went south, north, east and west to reveal the nation's sores and to shame its indifference. The hearts of her listeners were moved by what they heard, their consciences pricked by the uncompromising, ugly facts she presented.

By 1935 a modest national headquarters had been opened in Rio. As one *Educandário* after another

began to rise, President Getúlio Vargas called Eunice to the presidential palace and asked how he could help. "Match federal funds for every *cruzeiro* we raise voluntarily, Mr. President," she replied. "We'll organize a society and build one of our homes in every state, every territory."

"An impossible task," said the President, aware of the vast areas of the country lacking even roads. "Why not concentrate on a few difficult spots and leave the rest until later?"

"We'll do the impossible now," Eunice Weaver said emphatically.

"Se Deus quiser," murmured the President. "God willing."

"With God's help!" corrected his visitor, rejecting Brazil's ancient fatalistic phrase.

The President looked at her sharply, then smiled in surrender and repeated, "With God's help."

The next time the state governors met in Rio, President Vargas invited Senhora Weaver to address them. They were less than enthusiastic at the prospect. She gave them strong meat.

"I had a friend in your state, Excellency," she said to a governor in the front row. "His name was Francisco, and he was a healthy little boy of eight. When his parents were sent to hospital for leprosy, there was nowhere to put him so he went along with them. He wanted a bicycle more than anything else in the world, and I promised him one as soon as I could find the money. We have so many things to do with our money that a bicycle could not have priority, but in the end I bought one and eagerly took it to him. I was too late. Leprosy had left him without fingers to hold the handlebars."

She had similar stories for other governors. When she finished speaking, they crowded round her to promise their help.

As the number of *Educandários* grew, they began to prove statistically what Eunice Weaver had always claimed, that healthy children taken from leprous parents would not develop Hansen's disease. In fact the children raised in these well-run foster homes were freer from *all* diseases than the average Brazilian child. Even more important, there was happiness in these homes.

In each one Dona Eunice, as she is lovingly called, is a familiar figure. She knows the name and history of every child, sees that they are treated and esteemed as individuals. "She understands that a child needs self-respect," an associate said. "She doesn't try to take the place of the missing parents, but she is a true and close friend."

When the first homes were built, neighbouring parents would send their children blocks out of the way to avoid passing them. But time changed that. Within a few years the *Educandário* band would be playing at town *fiestas*, its soccer team would play the other schools. And, as the children grew up, they

began to marry into local families.

The federation does not relinquish its sponsorship of its wards until they are settled in life with jobs or marriage. In recent years 216 young men and women have graduated into the professions: dentistry, medicine, law, teaching. And it was a great day when, in 1953, the baby of a girl who had been brought up in and married from one of the *Educandários* won a prize as the healthiest baby in Brazil.

Today Dona Eunice is 58, plump and white-haired. She suffered a great personal loss when her husband died in 1955. But she is still a dynamo. From Rio headquarters she averages a trip a week as she manages 170 federated societies, comprising 18,000 women and dotting Brazil from one end to the other.

At the Eighth International Congress of Leprology last September in Rio de Janeiro, Eunice Weaver was given the Damien-Dutton Award for her outstanding work in the field of leprosy by the Damien-Dutton Society, a Catholic religious order in the United States. She received Brazil's Order of Merit, the first woman ever to be given this decoration, and she has become a living legend in her country.

She counts as her greatest reward, however, the 20,000 healthy children of leprous parents who have gone through her *Educandários* and on to a life far better than the average child of poor Brazilian parents could dream of. An additional 4,000 children have been placed in adoptive homes, and 12,000 more are treated in their own homes, thus also escaping the fate of their parents. Meanwhile, in Brazil and in other countries where Eunice Weaver's save-the-children techniques have been practised, the number of cases of Hansen's disease has been substantially reduced.

Perhaps her deepest satisfaction is the knowledge that her countrymen have at last looked squarely at the problem of this dreadful disease and have decided that they are, indeed, their brothers' keepers.



Artfelt Comments

At an art exhibition the pictures were labelled by the artists with title and comments. Underneath one abstract was a sign which read: "Of course you could do it, too, but *would* you?" —Mrs. J. H. W.

Picasso, usually reluctant to finish a painting, once asked a museum exhibiting one of his works to put a sign next to it reading, "Don't touch. Painting still alive." —K. S.

The nuclear-test-ban agreement—whatever our hopes for it—does not mean the enemy has gone away. There is danger in false hopes and false assumptions

The Cold War Isn't Over

By Henry Jackson
U S Senator from Washington

We confront complex issues today, and understandably many of us hope for simple answers. So it is not surprising that convenient but false assumptions work their way into some people's thinking. It is useful to examine the credibility of certain assumptions about international affairs held by considerable numbers of people.

1. There is the widespread assumption that the Chinese-Soviet quarrel reduces the Communist threat to the West.

A Vietnamese might be permitted some doubts. Or a Nehru. I believe that the truth may be exactly contrary to the reassuring words.

Khrushchev thinks our day has passed. Khrushchev and Mao are not quarrelling about *whether* to bury us. They are quarrelling about *how*. It may be that Mao plans a 12-foot grave and Khrushchev a six-foot one. In any event, they both seem to have in mind a cemetery.

The Moscow-Peking dispute is being played for very high stakes. The leadership of world Communism is involved. So is the fate of men who see themselves as the locomotives of history. Khrushchev and Mao each desperately desires to show that his policy for liquidating the West is best. Each needs victories. The consequences for the rest of us may well be a period of rising tensions and dangers, rather than the opposite.

Condensed from The New York Times Magazine

These days, Khrushchev's tactics must be tailored to take into account his troubles with Mao. But this does not mean his objective of world supremacy has changed. Khrushchev is adept, resourceful and devious in his manoeuvres. We have seen his smiling face and his pounding shoe; we have seen him export doves of peace one month and nuclear missiles the next. The point is that whether Khrushchev is the jovial backslapper at a cocktail party or is launched on a harangue at the Berlin Wall, he is the same dangerous man. He can turn it on and off again in quick succession. We can expect that Khrushchev will continue to twist and turn, thaw and freeze, agree and disagree—in pursuit of his ultimate aim, which he openly admits is to bury us. (There is both a lesson of history and a warning for the future in Russia's sudden signing of a non-aggression pact with Hitler.)

2. The assumption is widespread that the Russians can be won over by a policy of inoffensiveness.

This is a fallacy held by many good and decent people who let their hearts prevail over their heads. We have all heard arguments that amount to nothing more than "if we trust the Communists, they will trust us." We are told that the United States should take unilateral initiatives to reduce its strength, to set a "good example" and quieten Soviet suspicions.

It is not convincing to say that it is impossible to know whether this policy will work until it is tried. Some experiments are best left undone.

Just consider India's experience. No state has tried harder than India to find security by a deliberate policy of inoffensiveness. India has had to learn the hard way, as have others, that expansionist states do not respect weakness. I am sure Nehru does not relish this on-the-job training programme, but it may save others from a similar schooling.

All of us want peace. The debate is over means. The debate needs to receive our most thoughtful, honest, tough-minded attention. But certainly the weight of responsible opinion lies with preparedness combined with restraint—what President Theodore Roosevelt meant when he advised his countrymen to speak softly and carry a big stick.

The only way to bargain successfully with expansionist states is to maintain the strength to make bargaining attractive to them.

3. There is the widespread assumption that the arms race is leading straight to catastrophe.

A familiar argument goes like this: Arms races have always led to war; the world is engaged in an arms race; therefore, we are heading for a nuclear holocaust..

This argument rings hollow. It was not an arms race that led to the Second World War. On the contrary, it was the failure of the

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Western democracies to prepare for war that led to its outbreak in 1939. It was Chamberlain's failure to recognize the danger of a demagogue like Hitler, bent on aggression, that led to Munich. This is the reason Winston Churchill has called the Second World War "the unnecessary war."

As I read history, international peace and security depend not on a balance of power but on a certain imbalance of power favourable to the defenders of peace—in which the strength of the peace-keeper is greater than that of the peace-upsetter.

An expansionist nation will never be satisfied with this state of affairs. And for this reason arms control is difficult to achieve.

A would-be aggressor will not settle for an arms-control agreement that would freeze him in a position of inferior power. On the other hand, an aggressor's objectives are served by an agreement which would permit him to acquire superiority by stealth.

As for the second premise: What arms race are people talking about? The United States is not engaged in an arms race. It could, if it wanted to, build more weapons and build them faster. But its goal is not an unlimited buildup. Its goal—which should be frankly acknowledged—is to create and maintain, in co-operation with its allies, a relationship of forces favourable to peace. The real road to catastrophe would be to permit an unfavourable relationship of forces to arise.

I believe that this is an understandable position—and that the public utterances of American statesmen about defence and about arms control or disarmament should be put in this perspective. Too often, however, high officials speak as though a nuclear-test ban were mankind's last best hope, or as though the choice is between one more concession and catastrophe.

4. There is the widespread assumption that American superiority in conventional forces was the decisive factor in October 1962, in the near-collision over Cuba.

This is, of course, wrong, as ought to be apparent.

The strengthening of the conventional U.S. forces, which I have strongly supported, was one of the major accomplishments of the Kennedy administration. U.S. forces are better balanced than they were and better prepared to meet the contingencies they may face.

But the decisive factor in October 1962 was *will*—the evidence that the United States was prepared to take whatever risks were necessary to obtain satisfaction of its demands. It may be that Washington did not demand enough—but that is another question. Most of what was asked for was obtained. And the reason was that Khrushchev became convinced America's will was firm.

His reply to Communist Chinese

criticism was as free of mumbo-jumbo as a statement could be. He said, "The paper tiger has nuclear teeth." And when Khrushchev found that Americans were not as tolerant as he had supposed, he rushed to get the missiles out, as one observer put it, "apparently unimpeded with any worries about 'humiliation.'" He was clearly worried less about his face than about his future. •

It is important to be very clear about all this, for if conventional superiority was the decisive factor in Cuba, then what now defends Berlin?

The answer is that the security of Berlin also depends on will. I, for one, would not wish to convince Khrushchev that it was U.S. conventional superiority that was decisive in Cuba. Or so to convince America's European allies.

The Communists, by virtue of their geographic position, can deploy their forces to achieve conventional superiority at most points along their long boundaries. What deters them is fear that they might start something bigger than they are prepared to risk.

Strong conventional forces are needed; there is no argument about that. But it would be a tragic error to encourage the Communists to believe that they will meet only these forces so long as they restrict themselves to aggression with conventional means.

Unhappy Returns

ACTOR-MANAGER Sir Herbert Beerbohm Tree broke the news to an author like this: "My dear sir: I have read your play. Oh, my dear sir!"

—*The Albatross Book of English Letters*

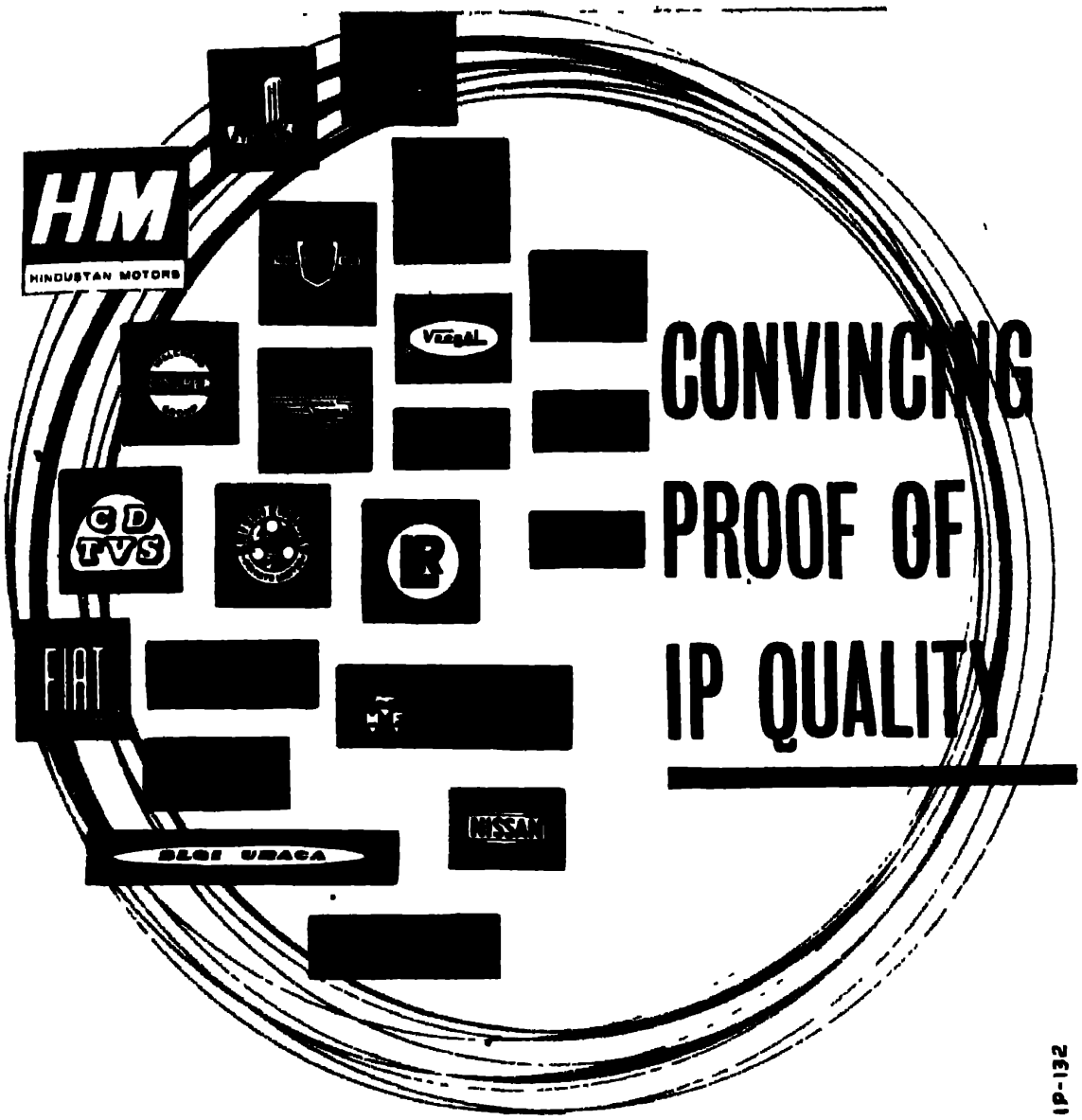
A MAGAZINE writer was cajoled into reading a manuscript written by a dentist. He found it hopelessly dull. Returning the manuscript to the dentist, he carefully began his criticism: "This may hurt a little . . ."

J. C.

IN ANALYSING why a religious publication had rejected her manuscript, Helen Topping Miller thought perhaps it was because one of her characters used the word "darn." She rewrote the story, cut out the offensive word and sent it back to the editor with this note: "I have cut the 'darn' out of my story. I hope you can use it now."

Once again the story was returned. This time there was a message scribbled on the margin of the rejection slip: "We do not wish to appear irreverent, but if you cut the hell out of this story we still could not use it."

—L. A.



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Humour in Uniform

DURING the fighting in North Africa, a relatively green company of British soldiers were left to defend a strategic hill against Rommel's troops. By nightfall they not only had lost the hill, but were about to be pushed into the sea. To rescue them, the area commander called up a crack company of the Guards, who recaptured the hill and turned the position back to the original company.

The following day Rommel counter-attacked and once more forced the defenders off the hill. Back came the Guardsmen and again recaptured the hill. As the position was being turned over once more to the original defenders, the officer in command of the Guardsmen saluted and said to his embarrassed counterpart, "I say, old boy, this time could I have a receipt?"

—STANLEY VARCOE

WHEN I WENT overseas in 1942, our ship seemed too dilapidated to survive the trip. But if the government felt it was safe, who was I to argue? That is until one day on deck I overheard a conversation between our mess sergeant, a veteran of the First World War, and one of the ship's crew.

"This tub reminds me of the rusted old wreck they sent us overseas on during the last war," said the mess sergeant.

"What was her name?" asked the sailor.

"The *Chateau-Thierry*."

The sailor paled, then said, "This *is* the *Chateau-Thierry!*" —T. K.

AS POSTAL clerk for recruits taking basic training, I recently lectured them on the correct preparation of return addresses. Using as an example, a letter with no return address, which had been posted the day before, I asked which trainee wrote to the girl to whom it was addressed.

I was just as surprised as the two recruits who answered simultaneously, "Oh, that's my girl friend!"

— STANLEY SILVERMAN

JUST BACK from an eight-month Mediterranean cruise aboard a destroyer, my brother and his mates were recounting their adventures. Noticing that one who normally wore contact lenses had glasses on, I asked what had happened to his contacts.

"I'm not sure," he replied sheepishly, "but I think I drank them!"

—D. ARMSTRONG

INSPECTIONS were part of the daily routine at our base. After a while the spit and polish wore off, and we slid through inspections.

But when we were told of the arrival of a new colonel at headquarters, we put in a busy week getting our lockers and kit in order. Finally everything was ready for the colonel to review.

As we stood at attention, the colonel flew over us in a helicopter! —V. A. I.

THE WORST part of camp was that feeling of complete isolation. However, by the tenth week our company was allowed to buy a radio. There wasn't a group of men anywhere that enjoyed anything more. Even when our sergeant warned us that we'd lose the set unless we passed the next general inspection, no one was particularly concerned. We had checked with regimental headquarters and knew that he couldn't take the radio from us.

Then came the inspection. Only when we failed it did we realize the ace the sergeant had up his sleeve. His never-to-be-forgotten order: "This company's radio is filthy. Take it apart and scrub it!" —JAMES REEVES

ANXIOUS as I was to join my husband in Germany, I dreaded my first plane flight, and expressed my trepidation in a letter to him. Not wanting me to be frightened if some small thing did go wrong, he wrote back these cheery words: "I've never been on a plane yet when *something* didn't go wrong." —MRS. ROBERT SANDERS

VISITING my wife in the maternity ward at the camp hospital, I was amused by this sign over the entrance: "Call Us Any Time Day or Night—We Deliver." —A. R GRACH

THE LATE Alexander Woollcott went to France during the First World War as a sergeant in a Medical Corps unit that moved into a dismal camp near Le Mans. The men lived in leaky tents with mud and puddles of rain under their rickety beds. Woollcott was luckily transferred to the Paris office of the U.S. Army newspaper, *The Stars and Stripes,* and he spent the rest of the war in luxurious living, dining nightly at the Ritz, entertaining friends. When the Armistice came, he sailed for home on a troop transport, where he met a comrade from the old medical company at Le Mans.

"You made an awful mistake leaving our unit when you did," the other soldier said.

"Why?" Woollcott asked.

"The week after you left," the soldier said, "they put wooden floors in our tents." —JOE MCCARTHY

A FIGHTER pilot and perennial bachelor made his position clear to one and all: "No matchmaking! I've flown high and wide for years. And that's the way it's going to stay. High and wide. And alone."

Then came the day he sent this telegram announcement to all his friends: "Got shot down at 5 p.m. Jerry." —A. C

WHEN my sister, the mother of seven, married a bachelor soldier, we waited anxiously to see how the marriage would work. It soon became apparent there were two sources of friction: the casual type of housekeeping necessitated by a large, active family and the prodigious amounts of food consumed, with constant traffic through the kitchen.

My sister confided to us that her husband would retreat to his workshop whenever he felt in danger of losing his temper. We all relaxed, however, when his finished handiwork was stuck up on the kitchen wall. A true labour of love, it was a large piece of wood, sandpapered and varnished, proclaiming in hand-carved letters: "THE PERPETUAL MESS."—M. K



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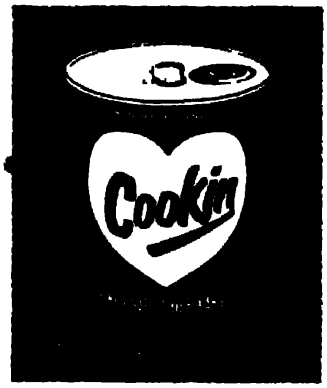
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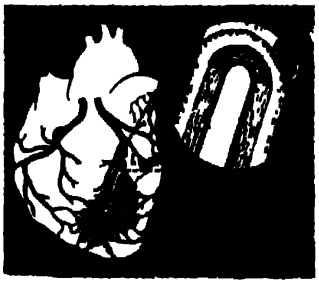
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The Spectacle That Astonished Salonika

Jayne Baker Spain



How an imaginative Iowa woman turned trade-fair exhibitors' dull demonstration of what the handicapped can achieve

By Don Wharton

Throughout the September heat in Greece, huge crowds stood enthralled before one exhibit in the U.S. pavilion at Salonika's 1962 International Trade Fair. What they watched was a team of three boys and a girl assembling a ten-foot section of a wheel conveyer—a chute-like device that moves goods and materials around factories and warehouses. It was an intricate operation, involving fitting together 451 small parts, threading 50 axles through 120 skate wheels, applying dozens of bolts and tightening them to an exact degree of tension.

But it was something more than technical skill that fascinated the onlookers in the exhibit-room. The whispers of the crowd mounted into a great hum as scores of people turned to one another, murmuring, "The workers are blind! They're blind!"

Standing by the production line, intently watching both the workers and the visitors, was a slender, blue-eyed American woman, Jayne Baker Spain—the key to the whole

Condensed from The Rotarian

amazing spectacle. Mrs. Spain is president and owner of the Alvey-Ferguson Company in Cincinnati, Ohio, manufacturers of conveying equipment for industry.

When a U.S. government official first came to Mrs. Spain with the thought of getting Alvey-Ferguson to exhibit at Salonika's 27th annual trade fair, a major event in northern Greece, she was told that the American theme would be "resource development for a better life." The theme was intended to cover water resources, power resources, industrial and commercial resources. But Mrs. Spain, thinking of human resources, said, "We use blind workers to assemble conveyers."

So, with government approval, she began developing a company exhibit which would tell two stories about fuller use of national resources—one illustrating the advantages of efficient movement of materials; the other, the capabilities of disabled persons. One restriction made the task more difficult: government policy requires all demonstrators in American exhibits at international trade fairs to be nationals of the host country. But Mrs. Spain welcomed the challenge of training Greek blind.

Many company presidents would have turned the work over to assistants. Not Jayne Spain. Long active on behalf of the disabled, she determined to do the job herself. First, she mastered each step of the assembly process, going into the shop for practice every afternoon after the factory closed. Meanwhile, she learned some basic Greek words to help her in the job.

Then, in August 1962, Mrs. Spain flew to Salonika, where, at the Blind Institute, she met the students chosen for the task—four boys and two girls, 18 to 21 years old. Totally blind, they had studied weaving, basket-making and other handicrafts, but had never worked on anything comparable to a production line.

Mrs. Spain began by telling them about conveyers: how they are used in industry, how they are made and how in Cincinnati certain sections are assembled by the blind. Her approach stressed abilities rather than disabilities. The reaction was overwhelming; the students could hardly believe they were to have this unique chance to show their countrymen what the blind can do —and to be paid for it.

The little group went to the pavilion where an Alvey-Ferguson engineer had set up a production line with a moving conveyer-belt that would bring in component parts, and an overhead conveyer that would carry away the completed sections. Mrs. Spain let the boys and girls feel their way around, then began the training.

It was hot in Salonika. The mercury frequently rose to 100 degrees; the exhibition hall had no air conditioning and the machinery created

still more heat. But the blind six practised uncomplainingly, concentrating on the task before them. They were to work in relays, a team of four, with two as relief. Once, when Mrs. Spain suggested suspending practice to go outside for a breath of air, all six shook their heads; and one of the girls who could speak a little English, Vasiliki Psaltou, said, "No, we want to stay."

The first inkling that the exhibit would have a smashing impact came the day before the opening, when the Press visited the fair. Fifteen countries had exhibitions and in the U.S. pavilion alone more than 100 firms were represented, but the blind exhibit was the only one mentioned in the Salonika newspaper. The conveyer assemblers made the headlines and a front-page picture. The names of all six blind students were given and the newspaper reported, "They work as if they were not handicapped and produce their work with excellence."

Next day Demetrios Manentis, minister of northern Greece, visited the pavilion, was moved to tears by the sight of the blind at work. The Metropolitan, His Holiness Ponteleimon, came in his black robe and jewelled necklace, gave his formal blessing and then, in English, told Mrs. Spain how grateful he was that thousands of Greeks would see what the blind could do. That day alone, 46,322 people saw the exhibit; and they kept coming for three weeks, eight hours a day, packing the area from wall to workbench, listening to the narrator, watching the assembling, then waiting to watch the whole cycle again.

Most vocal in expressing their gratitude were civic officials, religious leaders and professional men who said that from this exhibit could come a new attitude towards the potentialities of the blind. This was underlined by the reaction of thousands of farm people who came from the outlying villages, their faces deeply lined, their hands roughened by years of hard work, and stood fascinated, doubting their own eyes.

Often farm women would muster enough courage to speak to Mrs. Spain through the interpreter, tell her of the blind in their villages, then ask questions. One woman wanted to know whether she could bring in her blind daughter, 28, who spent her days sitting idle and despondent in a corner at home. The next Sunday the woman came, bringing the daughter and a bouquet of jasmine. They talked with Mrs. Spain, and then a few days later the mother returned with another bouquet and word that her daughter's hopelessness had disappeared, that she was trying to take part in household chores.

Several days before the fair closed, the head of a Russian trade mission in Greece was taken through the U.S. building. When he reached the

conveyer exhibit he blandly dismissed it, saying that they had conveyers in Russia, too.

He was informed that he was missing the point: "These workers are blind." The Russian snorted that he didn't believe it, and pushed up close to the workers and stared at them. Then his face turned crimson and he stalked out of the room.

To the end the blind worked tirelessly, never slackening their pace or losing their enthusiasm. They insisted on working at a fast clip, though Mrs. Spain urged them to slow down. When the team was changed, the two giving up their places at the workbench would not leave the room—they sat close by so that if necessary a quick change could be made without loss of time.

On the last day the six came bearing gifts which they had made for Mrs. Spain—leather book covers, a basket-like handbag, wicker trays. As long as she had things that they had made with their own hands, they said, she would remember them.

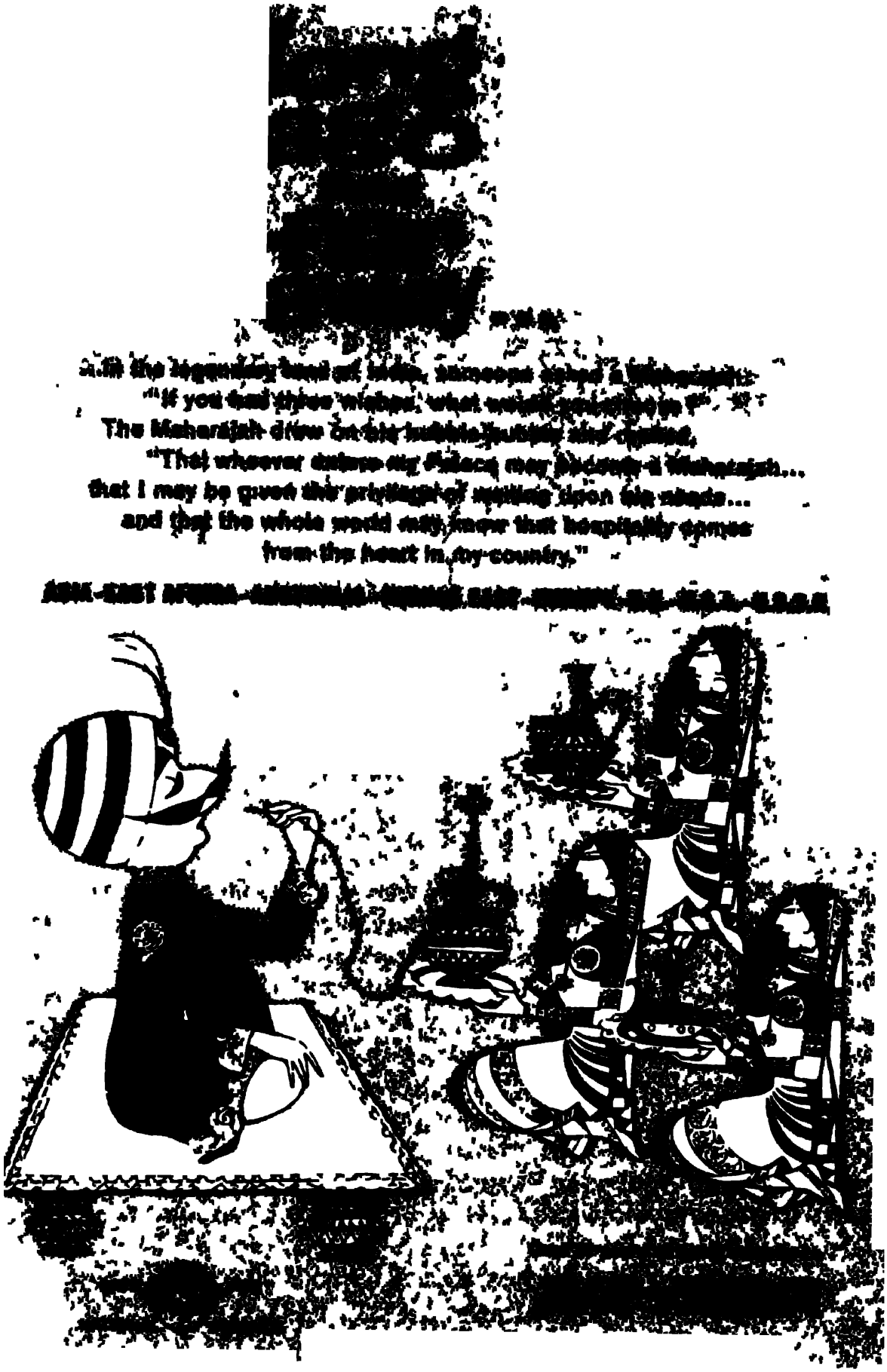
But this was not the end. Mrs. Spain had started out with an industrial exhibit, but the human aspect had outshone the commercial. "Without words," she says, "the exhibit told the story of what America is—that we care deeply about people, that we emphasize an individual's ability rather than his disability, that we are not solely interested in profits. This is a side of the coin of capitalism that many do not know."

This set Mrs. Spain thinking—if the exhibit had so much impact in a free nation, what might it have in a Communist nation? So she began planning a similar exhibit for the Zagreb autumn 1963 trade fair in Yugoslavia, where all the Communist nations, except China and Albania, displayed their industrial skills and products.

Mrs. Spain worked with a school for the blind at Zagreb and her demonstration was seen by a million Yugoslavs. She believes that, while the commercial side of trade fairs is important, "we must get the other story across: that in a free-enterprise society, the human being has supreme value."

Scaled to Please

ON A RECENT visit to a country club, I joined a conducted tour of the lavishly renovated quarters. In the men's changing rooms I stepped on the scales and observed that I weighed my normal 13 st. 6 lb. I followed the group through the ladies rest-room and out of curiosity stepped on identical scales in the ladies' dressing-room. Weight—12 st. 11 lb!—W. E. N.



"So You're Kate's Girl!"



My mother wanted her daughter to be a talented child film-star. She got a bookworm. I wanted a demure, schoolmarmish mother. What I got was a flamboyant tomboy—but one who loved me

By Jeanmarie Coogan

My mother couldn't stand me when I was little, and I couldn't stand her. Neither of us was what the other would have chosen for a life companion.

The mother I had in mind for myself was middle-aged with brown hair pulled back in a bun. She wore an apron, baked a lot, was serious and soft-spoken, and sang hymns. Before her marriage she had been a teacher or librarian.

My real mother had left school to go to work and help out at home. She was 19 when I was born, a tall tomboy with flyaway blonde hair and the wide shoulders, narrow hips and long legs of an athlete--which she was. Her temperament was strictly Irish. In the grimmest circumstances my mother could always find a bit of fun, and she had a great shout of a laugh that exploded like fireworks. An invalid neighbour often told me, "I love to hear your mother laugh." That neighbour lived two houses away. Other mothers called their children

Condensed from Ladies' Home Journal

home in a shaky soprano. My mother put two fingers to her lips and produced a whistle that could be heard in the next street.

My mother's idea of a good time was to crowd a lot of people (preferably relatives, of whom we had thousands) into our small house, provide drinks and cold meat, dancing in the early part of the evening, singing towards the end, and fun and jokes all night long. Far from being a hymn singer, she lullabied me with "Melancholy Baby." As for my father, he seemed to think everything about her was just perfect.

If my mother wasn't what I had in mind, I was even further from her ideal. I wasn't even the right sex. When I was born, she was so incredulous to find I wasn't a boy that she had to ask her sister to think up a name for me. She soon decided, however, that I was the biggest, fattest baby in the hospital nursery and therefore worthwhile.

And besides, having come from a family of ten, she anticipated other opportunities to use all those good boys' names she had thought of. Then, one year after I was born, an emergency operation destroyed the possibility of her ever having another child. This explains a lot to me now, but all I knew then was that it was hard enough to be one child to my mother, and I just wasn't up to being ten.

Take pluck. Pluck was very important to my mother. When I came home crying because someone had hit me, she would say, "Look, put up your fists like this."

"I can't!" I'd wail.

"Put up your fists," she'd command. I'd just wail louder. Then she would cock her right, ready to land one on *me* out of sheer despair.

My mother decided that I was to be a beautiful, talented, rich singing-and-dancing child film-star. With pluck. So, at three, I was enrolled in Miss La Palme's School of the Dance: toe, tap ballet and acrobatics. At four, I was doing so well that Miss La Palme used me for demonstrations. This was a good time for my mother, and she was busy taking me to lessons, parish-hall shows, women's-club recitals and talent nights at local theatres

But all this came to an early end. In my first year at school I learned to read. It was a heady experience, the key to a magic door. From the school reader I went on to reading cereal boxes, advertisements on the tram, medicine-bottle labels. Little by little, the pattern began to show itself.

"What do you mean, 'As soon as I finish this page'? You practise that new dance routine *now*." Then, "I'm sick of having you hanging around that library." Finally my mother came upon me, the night before a recital, reading instead of rehearsing. "Dear God," she cried, calling on Highest Authority to witness, "reading! Sitting there reading! And that

Shirley Temple out there making a mint!" Tears filled her eyes, and she turned away.

At last the ultimatum "Reading, or dancing lessons. What's it going to be?" Her face showed hurt, despair and bewilderment when I said, "Reading."

That week-end she told Aunt Margaret, who said, "Maybe it's for the best, Kate. I mean, look at her. She's almost seven, skinny, two front teeth missing. She's no Shirley Temple."

As I grew older, our scenes with shouting and crying on both sides became fewer. By the time I had started secondary school Mother and I were even beginning to understand each other—a little.

Athletics were always important in her family. In the early 1920's, when she was growing up in Philadelphia, the family—ten boys and girls—played for various baseball, football, basketball and softball teams. For several years my mother and her sister had dominated the scoring columns in the women's sport leagues. Whenever we were out with her family, some stranger was sure to come over and ask one of them, "Isn't your name Dennehey? I remember seeing you play . . ."

I went to an all-girl high school, and my mother was pleased when I made the basketball team but dismayed to learn I was a guard.

"When are you going to play forward?" she asked.

I answered, "Never."

"But, Jeanmarie, you'll never score!" She never enjoyed the game quite as much after that.

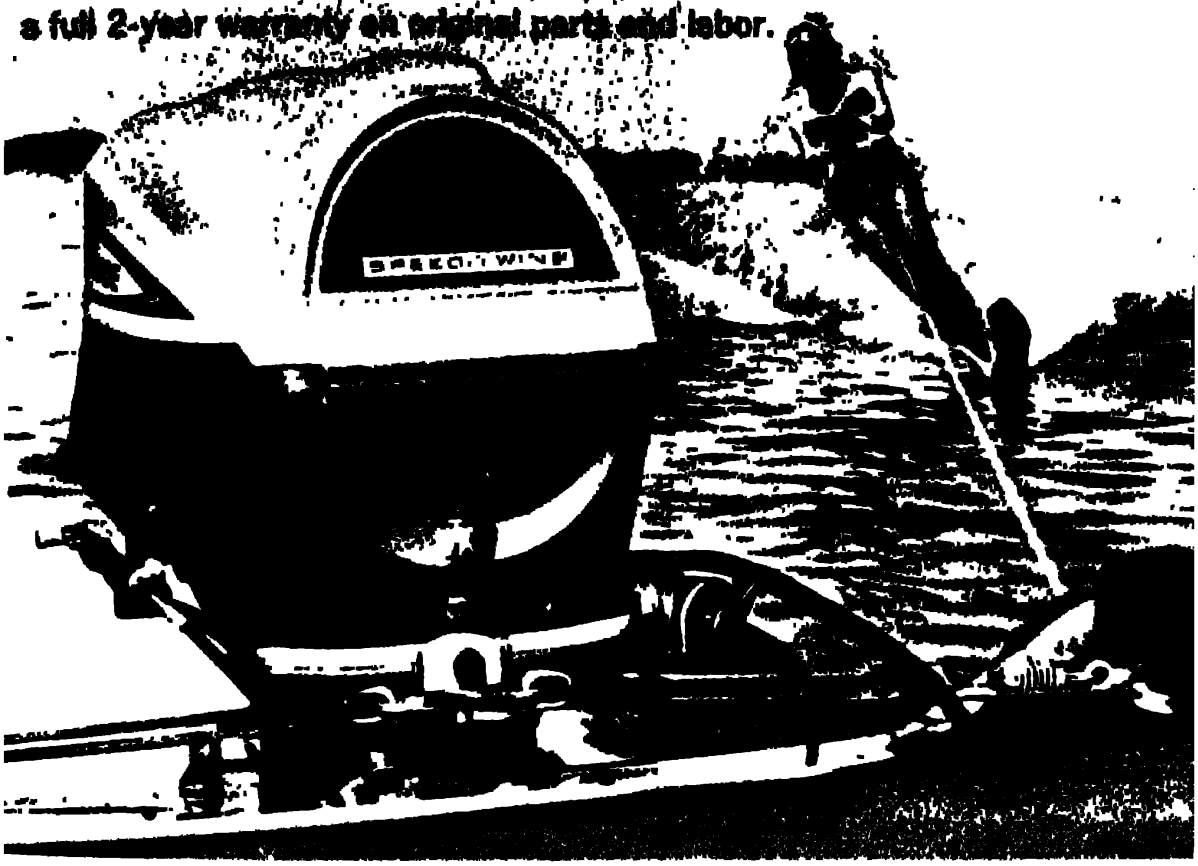
In another thing I was beginning to meet her standards: pluck. When I graduated from high school I won a partial scholarship to college. College had never once crossed her mind. My father was in the army then, and my mother, to supplement the allowance, worked as a stitcher in a book-bindery at a meagre salary. Even with my summer and after-school jobs, we were just barely managing. When I told her the news, she was speechless.

But one day shortly afterwards she announced proudly, 'Jeanmarie you *are* going to college." She had got a job paying what was a high wage for those days, cleaning railway carriages. It was a dirty, back-breaking man's job, but she never complained. Partly because I didn't know what hard physical labour was, partly because of her own attitude, I never questioned that my mother should work so hard for my dream.

At college I made honours in my studies. But this didn't please my mother so much as when I was chosen to attend various student conventions—all expenses paid. My mother had never been far from home, and it seemed very glamorous to her that I should be going to distant places. It seemed glamorous to me, too. I would board the train wearing a classmate's fur jacket.

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another's friend's skirt, and looking like one of those girls who pose for soft-drink ads—the kind of girl who has a mild, soft-spoken mother who before marriage had been a teacher or librarian. That's how I looked.

One day when I announced a trip, my mother said she would be working in the railway yards at the time my train would be leaving and she would wave. When the train pulled out I scanned the yard and at last I could make out a figure waving. It was my mother. I stood up and waved vigorously. But the sun was in her eyes and, unable to see, she just kept waving her hand slowly back and forth. I saw her: blonde hair pulled back in a scarf, thick-soled shoes, work-hardened hands. In my borrowed finery, standing on the floor that could have been scrubbed by my mother —all of a sudden it seemed terribly important that she should see me and know I was answering her. I waved and waved, but the small figure just kept waving unseeingly until we were out of sight.

The Irish code of conduct permits one to be flamboyantly emotional in public, but in private one's deepest feelings are held in strict reserve. Yet I know that day I could openly have told my mother how much I loved her.

The chance never came again. She died a few years after I graduated from college. Between my growing up and her death, however, I came to know that it can be a joy to live with someone who is completely different from you. We could never say the words, but my mother knew how I felt about her; I knew how she felt about me.

A few months after her death I was at a convention when a stranger came up to me. "This may sound crazy," he said, "but is your name Dennehey?"

"No, but my mother's was," I answered.

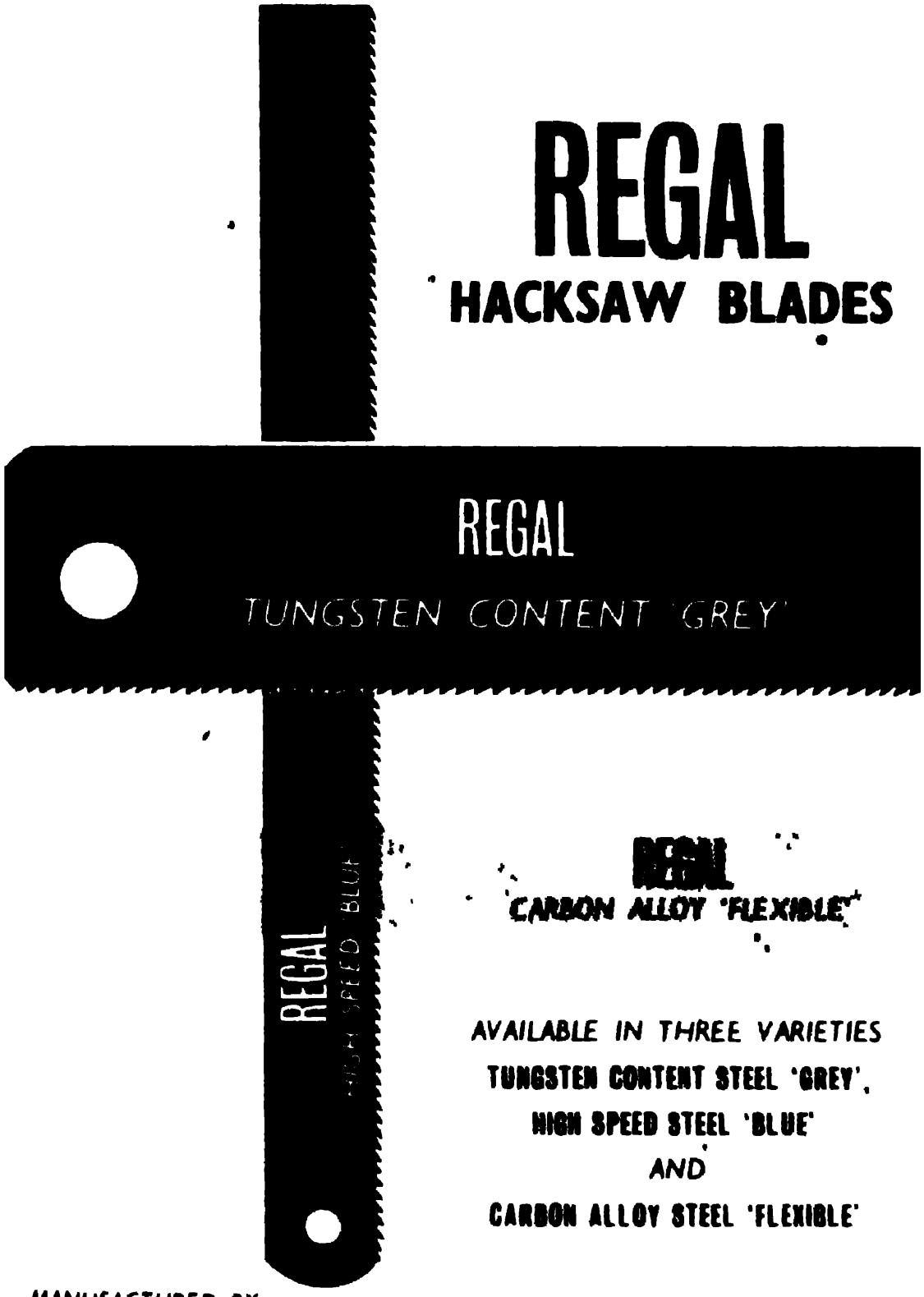
He snapped his fingers. "So you're Kate's girl! I haven't seen her since she was a kid. I knew all the Denneheys. Wonderful people." He shook his head, smiling. "You're Kate Dennehey's girl, all right. I'd know you anywhere."

I laughed and said, "Thank you. That's the nicest thing that's ever been said to me." And I meant it with all my heart.

Talking Shop

On the mirrors of three assistants in a Majorca barber's shop are notices reporting that the first specializes in general news, the second in sport and films, and the third in women and culture (*Palma de Majorca Ultima Hora*) . . . A sign on a barber's shop in Phoenix, Arizona, reads: "Twenty Barbers - Continuous Conversation"—(AP)

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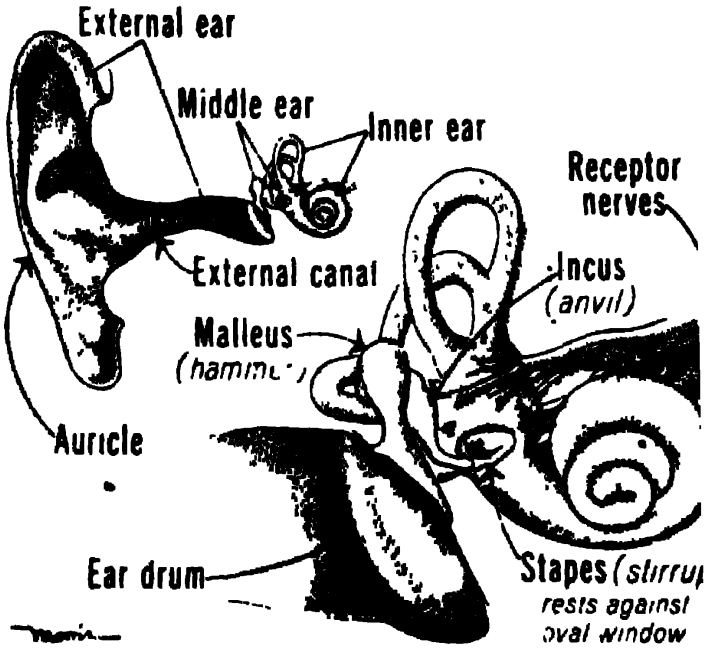


HEADS
OR
TAILS-
WHO CALLS?



They're Breaking the Silence Barrier

By Robert O'Brien



New surgical techniques and new advances in habilitation are enabling thousands of sufferers to escape from the solitary confinement of deafness

A 47 YEAR OLD housewife had been mildly hard of hearing since the age of 14. A couple of years ago her defective hearing took a turn for the worse. Efforts to use a hearing aid were unsuccessful. Cut off from normal communication with friends and family, she tried to adjust herself to the strange, solitary confinement of the deaf.

It was a shattering experience. She lived in a nightmarish world where people's lips moved, and no sound came forth; where a glass broke silently; where children's laughter was a noiseless grimace.

An ear specialist diagnosed her trouble as otosclerosis, a common cause of deafness that results in a bony overgrowth of the stapes, a tiny bone in the middle ear, and prevents it from conducting sound waves to the brain. A few days later he gave the patient a local anaesthetic and performed under an operating microscope a simple procedure

Condensed from Today's Health, published by the American Medical Association

called a stapedectomy. Deftly he worked loose the stapes, which the disease had "frozen" solid. Then he removed it. Finally he fixed in its place a stainless-steel filament one-fifth of an inch long, to restore sound conduction. The operation was a success.

"It is as though I were reborn," the woman told me.

She was one of the lucky ones whose hearing problem can be corrected surgically.

Many children are classified as dull, emotionally disturbed or even mentally retarded when the tragic fact is that they simply cannot hear well. By the time parents and teachers learn the truth, damage to the children's ears may be permanent.

Nevertheless, many who are afflicted, and parents of children whose hearing is impaired, have cause for hope. Dramatic new surgical techniques are being developed. Electronic instruments, capable of tests never before possible, are being put to use. Hearing aids are improving. New methods of rehabilitation are showing encouraging results. "More advances in the prevention and treatment of deafness have been scored since the war than in all previous medical history," says Dr. John Lindsay, of the University of Chicago.

Of all our sense organs, only the eye is as complex, as finely balanced as our hearing mechanism. Many things can go wrong. The two major types of impairment are conductive deafness and perceptive, or nerve, deafness. A combination of the two is called mixed deafness.

Conductive deafness may be caused by anything that obstructs sound waves in the ear canal or deadens vibrations in the middle ear: excessive wax or liquid, otosclerotic bone growth, infectious swelling of the middle-ear tissue, breaks in the chain of three tiny bones (hammer, anvil and stapes) along which vibrations travel.

In nerve deafness, the outer and middle ear function normally, but certain vibrations can go no farther. Circuits to the brain are "out of order." What is wrong? Usually the damage is to nerve endings of the inner ear, fibres of the auditory nerve, or hearing centres of the brain itself. Causes include head injuries, tumours and diseases, such as arteriosclerosis, that affect the brain.

Since nerve damage cannot be repaired, nerve deafness presents serious obstacles to successful medical or surgical treatment. But new techniques in rehabilitation are working wonders.

Specialists in the Services made great progress with men deafened by shellfire and explosions in the war. As a result of their advances in lip-reading, speech analysis and auditory training, the nerve deaf today, particularly children, stand a better than even chance of adjusting to their handicap.

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tape recordings, educational television—are helping the nerve-deaf to a better grasp of pronunciation and language, to a working interpretation of sounds that they *can* hear.

What about hearing aids? They are an indispensable help to thousands with impaired hearing, but experts urge the handicapped to consult an ear specialist before buying one, and to be realistic in their expectations.

"Hearing aids can be a great boon, and are a major means of coping with hearing loss," says Dr. Raymond Carhart, a noted audiologist. "But they remain, after all, only aids. They will amplify sound so you can use it, but don't expect them to restore hearing to its normal in every respect." Most handicapped children of average intelligence can learn to use hearing aids if they are fitted early enough. How early? Experts recommend, "As early as possible." Two- and three-year-olds have been fitted successfully.

Most dramatic have been the advances in surgery under the operating microscope. Today, working freely in the cramped galleries of the ear, surgeons restore hearing to patients once written off as hopeless. Two factors are largely responsible: development of powerful, binocular operation microscopes capable of

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That housewife's stapedectomy represents a brilliant advance in the combination of research and technical skill in the fight against otosclerotic deafness.

Ear surgeons have also developed a daring procedure for conductive deafness from causes other than otosclerosis. Called tympanoplasty, it serves a double purpose: treatment of middle-ear disease, and, through plastic surgery, the reconstruction of the delicate middle-ear mechanism.

A serious and sinister cause of conductive deafness, particularly in children, is a chronic middle-ear and mastoid infection. It can be brought on as a complication of scarlet fever, measles, allergies, head colds and other respiratory ailments. It is frequently kindled by diseased adenoids and tonsils. The middle ear becomes inflamed. Its mucous-membrane lining swells. Infectious fluid collects behind the eardrum and eventually perforates it.

If attended to immediately, "chronic ear," as it is called, can be controlled or cured. Neglected, it can smoulder for years, then suddenly flare up. Meanwhile, it may have destroyed part or all of the middle ear.

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and grafting procedures recently developed in Germany, the ear specialist can today work complex marvels of therapy in many of these cases. He drills out diseased bone and tissue. If accumulated infectious fluid has perforated the eardrum, he can build a new one with a graft of skin from the ear canal. If the hammer, anvil or stirrup—or any combination of them—has been destroyed, he can often reconstruct the drum and middle ear, and restore transmission of sound vibration. In extreme cases, where the entire chain has been destroyed, he can sometimes fashion a middle-ear chamber that manages without one.

These developments encourage ear, nose and throat specialists to step up the attack on other questions of vital concern to the deaf: What causes otosclerosis? How does the inner ear transform sound vibrations into nerve impulses? What is the significance of the electrical signals, or potentials, emitted by the inner ear?

Researchers are tackling these problems with high hopes of success. What Dr. John Lindsay has called "the terrible barrier of silence" is being crossed in new and wonderful ways. As researchers probe more deeply into the mysteries of hearing and the mechanism of the ear, it is certain that still greater triumphs lie ahead.

On the Spur of the Moment

GEORGE Richard Mant Hearne used to write a weekly adventure concerning either Sexton Blake or Robin Hood. Once, the artist who illustrated his work forgot which series he was illustrating. The drawing made for the next week's Robin Hood instalment showed a group of people sitting in the greenwood dressed in flannels and boaters fashionable in 1910. Hearne rose to the occasion and inserted a single sentence in his tightly-knit piece: "Swiftly disguising themselves in modern costume, Robin Hood and his Merry Men took counsel." - Mary Allingham

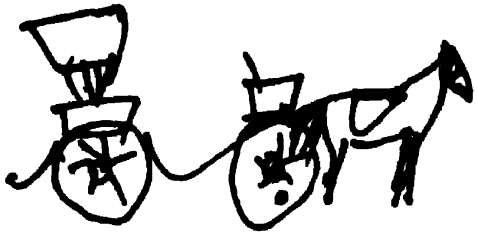
IN THE early days of live television adventure shows, there was a submarine epic featuring Captain Eddie. A studio set provided the sub's interior, and to lend authenticity there were shots of the vessel on the ocean. These were close-ups of a toy submarine floating in a studio tank.

One day a nature lesson preceding Captain Eddie commandeered the tank for a live turtle. In the confusion between shows the turtle was overlooked. At a tense moment in the serial, when the camera switched to a close-up of the submarine, the turtle stuck his head out of the water. At close range it looked like a horrible sea monster.

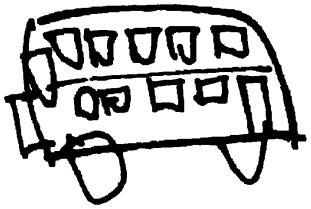
Seeing this apparition; the narrator ad-libbed: "Just then the look out reported that he had seen a sea serpent, but Captain Eddie said, "Such creatures are mythical—the man was too imaginative!" —M. C

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Come Into My Garden

In a jungle of weeds, a world of wonder

By Rutherford Platt

Explorer and botanist; author of "This Green World," "Wilderness," etc.

A THOUSAND fireflies over my garden one summer night sparked off an idea, and in the morning I rushed out to see what I had not seen before. Something tremendous had happened to my garden.

This is an area which some years ago I fenced with wire to keep rabbits out of the vegetables. For six years manure was dumped in and the soil deeply turned. Fat asparagus spears thrust up, runner beans dangled in heavy clusters, tomatoes burgeoned, cucumbers scrambled about. Then for three years the garden was untended; I was away. In the third year of remaining undisturbed it produced the lustiest, finest weeds on the face of the earth—far beyond my feeble efforts to destroy when I came along with a gardening fork weeks too late. I shifted to a scythe, but after sweeping about on the fringes of the area I surrendered, completely worn out. There the weed patch stood—a disgrace, a blot on respectability.

But why all the fireflies' pyrotechnics over the garden? In the morning air I saw that instead of a disgraceful weed patch, there had been bestowed on me a gorgeous, lush jungle filled with a fanciful menagerie. The garden had been turned into a frisky free-for-all for the great joust of living. The enriched soil for three years had been pulling like a magnet, and the countryside had showered it with spores and seeds.

This was no longer my property. As I parted fresh green goldenrod, giant black-eyed Susans, tall hawkweeds and grasses, I felt like a trespasser in a vast world inhabited by multitudes of curious nations. From this the fireflies had risen—the night-time breath of a spot teeming

Condensed from "The River of Life"

with an invisible wealth of life. Every inch from the soil to the height of the jungle some five feet above the ground, was the scene of the fierce drive to live. The summer solstice—the longest days of the year when many kinds of wild flowers are blooming, was only four days away.

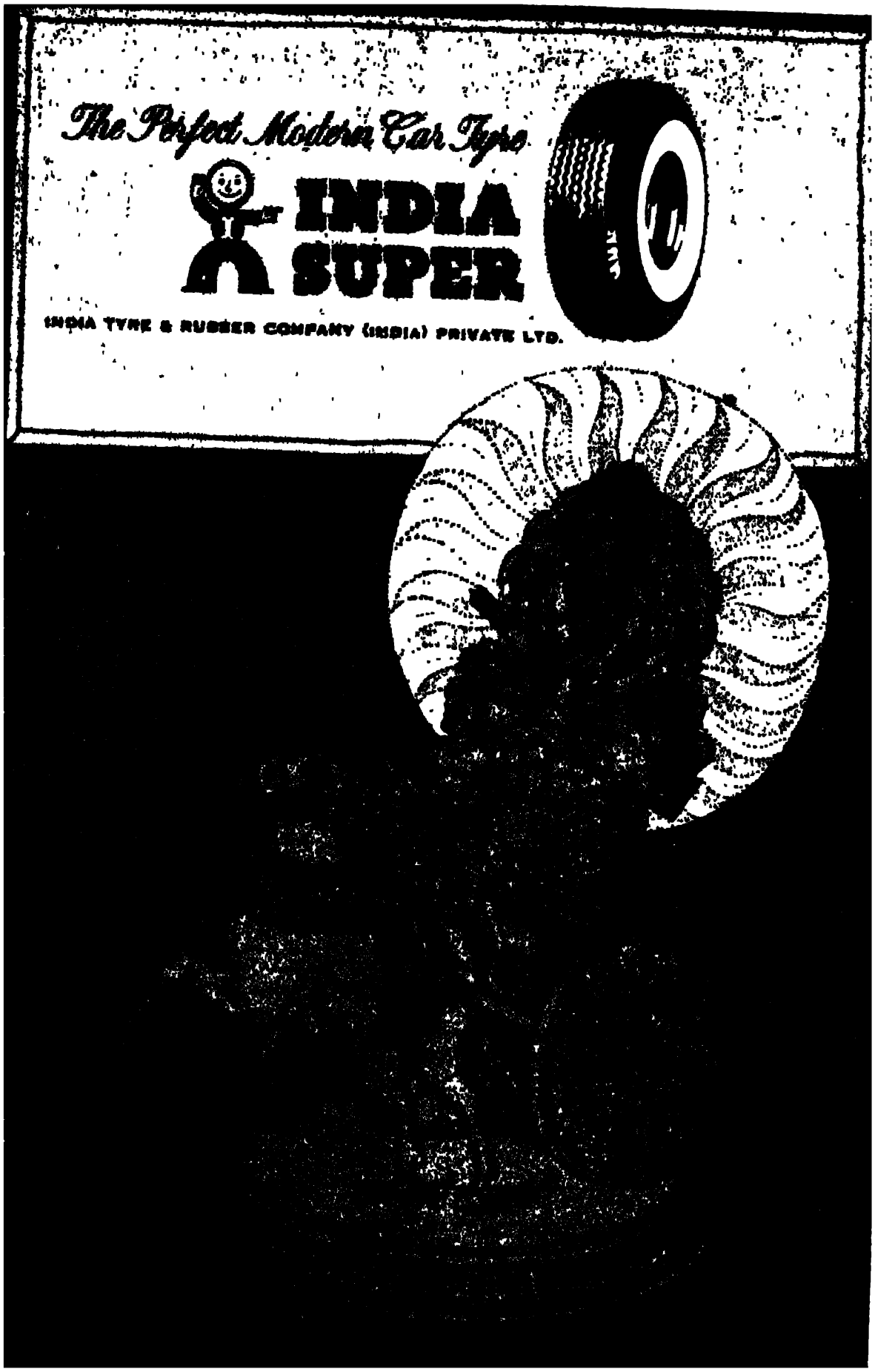
Have you ever peered into such a place as my weed garden and encountered its magic life? The spittle palaces of the froghopper insects glitter on every leaf. Froghoppers know that herbs grow fat and juicy so that they can stab them and blow bubbles—bubbles of sap are, for froghoppers, just as weatherproof and sunlight-collecting as glass windows. The curves of the bubbles act as lenses that focus the sunlight and give the froghopper eggs a warm and hospitable womb.

Among the weeds tiny spiders travel up and down long, trailing invisible threads beneath the upper leaves. (They know that the weeds grow tall just for them to have more scope and play for their silk.) Tiny flies land on the sunny side of leaves like sparkling gold nuggets, a sort of sunlight version of the firefly sparks. Their glitter is iridescent. When you catch one and turn it this way and that, the gold becomes bright blue.

Regiments of delicate little aphids in green, red or rich magenta coats stand on their heads and kick their heels in the air as aphids do. They know that the extra juiciness is for them. They drink for days without moving, and they swell up like Chianti bottles. The aphids stand tilted forward, with sucking needles thrust in to the hilt, blissfully unaware of anything except the delicious drinking. Give one of them a shove, up comes his head, withdrawing the sucking needle, and he scrambles away. In so doing, he must stumble over his fellows, who, without pausing in their drinking, violently let go their hind legs, like mad mules, and literally kick the disturber off the reservation.

Deep in the jungle I hear a low-pitched, powerful hum. The honeybees have been summoned by a super-energetic dance and they are licking up the sap coating of the green young raspberries which the bees know were put there for them. The bees ignore all flowers and pollen round about. For so fragrant sweet and moist are the stubs of fruit that they are in a frenzy.

This tall jungle, which has risen out of earthworm territory in two months, is in no sense a pathless tangle. Trails and roads run through it. One little path runs to a rabbit's nest, but the baby rabbits are already reared and off to wider horizons, or perhaps chased away. Twilight Drive is a boulevard made by a heavy body going back and forth over the ground and leads fairly straight through the jungle. Then it plunges into a dark, deep woodchuck hole, the biggest I have seen. The other opening of the great


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tunnel is about 30 feet outside the fence under a cranberry tree. Undoubtedly the woodchuck is now sleeping far underground.

The woodchuck has two purposeful roads through the weed jungle. Twilight Drive leads to a sunny spot, but for a hot day he has also built a hidden path into the shadiest area. I would say that this woodchuck at this place is the most satisfied animal in the world, without one problem. He has a home, a family reared and gone, conveniences, plenty of food, his ancestral enemies—the bear, wolf, lynx, panther—no longer about. He owns his place, tax-free, for a woodchuck knows that the soil was put there for him to dig in, and he knows that all the vegetation enriched with so much live seasoning is assembled so that woodchucks, who really own the earth, may lead delightful lives.

All this is no concern of the fireflies, who own the place at night.

Pardon, Your Slip Is Showing

"INFORMATION on prices and performances of the Ringling Bros., Barnum and Bailey Circus is obtainable by telephone. A special lion has been installed for the purpose."—From the Garden City, Long Island, *Newsday*

"THE Clifton Forge Rescue Squad was called to Iron Gate for Clarence Milton, seven, who had a possible broken leg. The squad splintered his leg and removed him to the hospital."

—From the Clifton Forge, Virginia, *Review*

HEADLINE on story of jewel theft in Malden, Massachusetts, *News*
"Salesman Says He Left 8,000 Rings in Malden Motel Bathtub."

"MISS ANDRA was a noted amateur chef, specializing in Hungarian cooking. There are no immediate survivors."

—From the New York *Herald Tribune*

" 'SINCE silk generates static electricity,' says Major General Howard Doan, U.S. Deputy Surgeon General, 'we have to watch the kind of underclothing our nurses wear in operating rooms.' " —From *Army Times*

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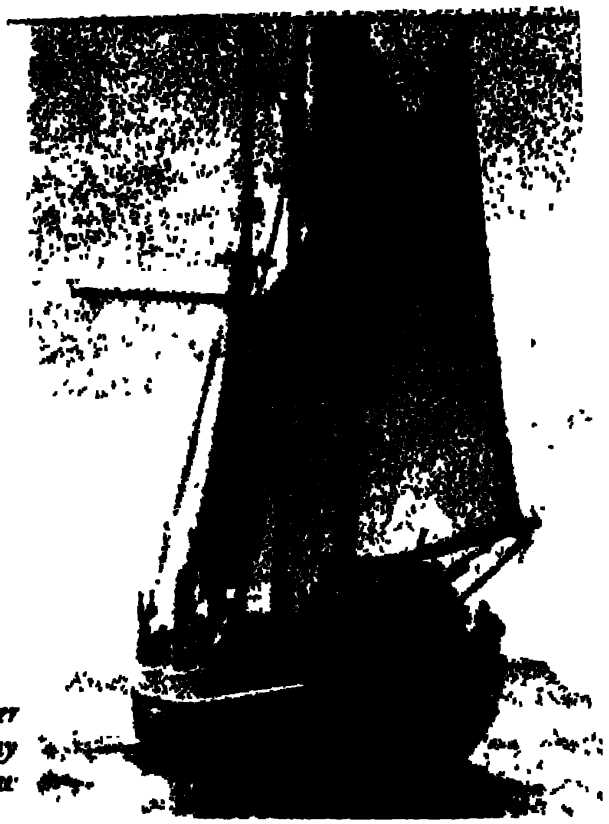
—From an ad in the Llandudno hotel handbook:
Quoted by "Peterborough" in *Daily Telegraph*, London

"DR EDMAN, your Personal Problems consultant, takes a much needed holiday this month with 'Friend Wife.' Pray for him." From *Christian Life*

"TWENTY children, the products of two ambitious recreation programmes conducted each summer by the Department of Parks and Recreation, will participate in National Physical Fitness Day."

—News release from the Los Angeles County Department of Parks and Recreation

Young Adventurers of "Outward Bound"



The 160-ton schooner "Prince Louis" with 24 Moray Sea School boys as crew

All over the world British-inspired Outward Bound schools are giving youngsters an adventure in character-building

By Geoffrey Lucy

Last summer more than 3,000 apprehensive boys in 11 countries experienced the most memorable—and the toughest—four weeks in their lives. They arrived with their rucksacks at such diverse places as a country house on the edge of Dartmoor, a tented camp in the Rocky Mountains, a gracious mansion on Germany's Baltic sea-coast, a palm-fringed beach in Malaya, an ancient castle in Holland and a former guesthouse overlooking a New Zealand sound.

On their first morning they were routed out of bed at dawn to take a brisk run and a cold shower. This was only the foretaste of the shock treatment ahead. Among the feats they were expected to perform swinging like monkeys along an aerial rope course strung 35 feet above ground, squirming through foot-high tunnels 70 feet below ground, sailing a three-masted schooner in a North Sea gale, surviving on minimum rations in the wilderness, climbing almost to the snowy summit of Africa's highest mountain.

These boys were attending not training camps for military commandos but Outward Bound schools, founded and supported by

Adapted from an article by Lydia Lawrence

educators and businessmen to build character through adventure. The youngsters, from all classes and races, are sent by employers, local authorities and parents, either as a mark of confidence, or in the hope of developing latent qualities of leadership and responsibility.

Outward Bound schools all over the world are linked by the idea behind a motto—"To Serve, to Strive and not to Yield"—and by the dreams of a remarkable man, Kurt Hahn. The idea was born of Britain's wartime dangers. In 1941, as the menace from Nazi U-boats grew, shipowner Lawrence Holt became alarmed at the number of seamen who died needlessly in emergencies. When ships were torpedoed many sailors in lifeboats, who might have survived had they continued the struggle for life, lost hope too soon. Some men even killed themselves.

Holt chanced to meet Kurt Hahn, former headmaster of Germany's famous Salem School. Run out of Germany in 1933 for his opposition to Hitler, Hahn had settled in Britain and founded Gordonstoun, the school in Scotland now attended by Prince Charles. When war came, Gordonstoun was evacuated to Aberdovey in North Wales, and here Lawrence Holt and Hahn tried to devise some way of steeling young men against physical and mental defeatism. The result was the Aberdovey Sea School. Holt called it Outward Bound because its students were outward bound to life as well as to sea. "We shall train boys not so much *for* the sea," he said, "as *through* the sea."

The experiment worked: apprentice seamen who had taken the course held out against adversity much longer than the others. Needless loss of life dropped markedly.

When the war ended, Hahn and Holt realized that Outward Bound could also serve peacetime needs. The idea spread rapidly. In Britain four more Outward Bound schools were created, each in a setting guaranteed to fire the imagination of adventurous youngsters. One was on the fringes of romantic, treacherous Dartmoor, two were among the lakes and mountains of Cumberland, the fourth was a sea school on Scotland's wild Moray Firth.

In Germany, Hahn opened a sea rescue training school at Weissenhaus near Lubeck and another at Baad in the Bavarian Alps. Holland followed in 1961 with a sea school on the Zeeland island of Schouwen.

Outside Europe, Africa took the lead with a school at Man O'War Bay in the Cameroons (now moved to Kurra Falls in the Plateau Province of Nigeria), another on the slopes of Mount Kilimanjaro, and a third at Melsetter in Southern Rhodesia. Malaya built a school at Lumut in Perak, Australia followed with one in the rugged bush beside the Hawkesbury River not far from Sydney. In the autumn of 1962, 35 boys began New Zealand's first



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course in the hills and sea near Anakiwa, in Marlborough Sounds. The same year, America carved an Outward Bound school out of an aspen forest in Western Colorado, with the Crystal River roaring near the camp and a ring of snowcapped peaks rising round it. Recently the Peace Corps was inspired by Outward Bound to set up a training programme in Puerto Rico to prepare volunteers for tests of endurance in under-developed countries.

Outward Bound became so popular that British youth leaders asked for a modified course for girls. The first was held as an experiment at Eskdale, one of the mountain schools, in Cumberland. Girls' courses are now offered in many countries, and a new school for girls only was opened last July at Towyn in North Wales.

The training offers boys all the adventure, challenge and excitement they can take. In return, it expects self-discipline and ungrudging effort. "We teach them to defeat their own defeatism," says Kurt Hahn.

Recruits do not have to be muscular athletes; they are a cross section of typical youngsters. But the extraordinary results show that the majority of boys are capable of meeting the rigorous demands of Outward Bound. Flabby city youngsters from London, Hamburg, Amsterdam and Sydney discover that they can run ten times the distance they thought they could, and carry three times the weight. They acquire skills they had assumed were well beyond their reach.

Early last year, for example, a lone climber plunged 100 feet down the steep east face of Helvellyn, one of England's highest mountains. Just before dusk he was seen by two walkers who passed an SOS to the Outward Bound school at Ullswater.

Within minutes a rescue team of



The Eskdale, Cumberland, Outward Bound mountain school

instructors and boys set off in a Land Rover, equipped with the ice axes, ropes, lights and food always held in readiness for emergencies. When the truck could climb no farther the team set off on foot. The temperature was – 9 degrees Centigrade (17 degrees F.) and an arctic gale drove blinding snow in their faces. They reached the injured climber just in time; he had broken bones and was almost dead from

exposure. The boys helped to revive him, dressed his lacerations and strapped him to a ski-stretcher. Then began the formidable journey down the mountainside in the dark, the boys often sinking to their thighs in drifts of powder snow as they struggled with the stretcher. At last they reached the truck, and the patient was rushed to hospital.

The boys were deeply moved by the experience. "I didn't know I had it in me," said one. "Until I came here I'd never even *seen* a mountain, let alone climbed one in a howling blizzard and helped to save somebody's life."

So keen is the enthusiasm of Outward Bound boys that they have sometimes triumphed where experienced adult rescuers have been defeated. When two valuable sheepdogs fell over a cliff near Cader Idris, a dangerous peak in North Wales, the well-trained local mountain rescue team were unable to reach the ledge where they lay. Firemen with special rescue equipment had to give up, too. In despair, it was suggested that the dogs should be shot to end their suffering. Instead their owner phoned Outward Bound at Aberdovey, a few miles away.

A rescue team of youngsters arrived, eager to use their newfound skill in real earnest. Two boys volunteered to be lowered over the dangerous cliff to the narrow ledge. They found that both dogs had broken legs, but the boys coaxed them into packs, slung them over their shoulders and were hauled up to safety. The animals recovered and are still working.

The idea behind Outward Bound schools all over the world is the same, but the course varies from place to place. In Malaya, Outward Bound takes boys on long jungle treks; in Kenya the course is climaxed by a dramatic five-day expedition 19,000 feet up Kilimanjaro, Africa's highest mountain. Australian boys spend a total of 11 days trekking through the bush; non swimmers cross rivers by kicking their way along a rope. New Zealanders try to climb seven peaks—the highest rising to 3,000 feet—in 36 hours; to supplement their rations they fish for blue cod and hunt wild pigs. Boys from the Moray Sea School in Scotland cover up to 300 miles in 12 days of sailing, canoeing and foot slogging through the Highlands. The Dutch course ends with a four day land and sea journey which demands compass work, map-reading, cooking, camping, sailing; difficult tasks calling for inventiveness, perseverance and courage are handed out unexpectedly to small groups of boys.

Samaritan services performed by the boys differ, too. In the developing countries, they construct bridges, show villagers how to build better houses, help at health centres. But the basis of every service is the concept of rescue. Says Kurt Hahn "In active rescue work, we believe,



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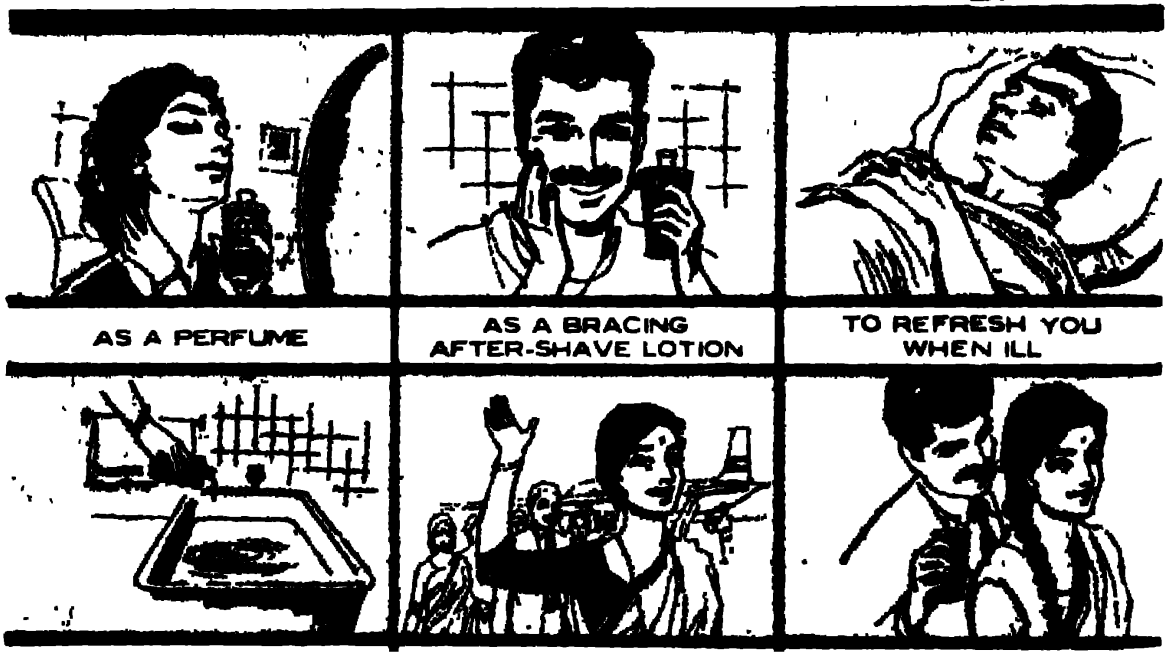
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Genuine emergencies give the boys added zest for all-out effort. When bad weather threatened to ruin Schleswig-Holstein's grain crops in September 1962, boys from Weissenhaus toiled in the fields, sometimes for 12 hours a day, until the harvest was in. When floods struck Australia's Hawkesbury River, lads of the Outward Bound school canoed 40 miles upstream and helped farmers to dig drains, salvage property and re-erect fences. Last winter's heavy snowfalls in Britain gave boys at the Devonshire school a spectacular chance to put their enthusiasm to practical use. Sleeping in snow-holes at night, they ranged the countryside, digging through four foot drifts to get food to isolated farms, lugging fuel on home made sledges to old people, rescuing sheep in day-long sweeps over the snow covered moors.

At all the Outward Bound schools the over all purpose is the same: to expose as many boys as possible to challenge and adventure. Is this too much -or too dangerous? Sir Spencer Summers, M.P., chairman of the Outward Bound Trust, thinks not. "We subject boys to greater risks than they would normally face, but we also teach them the right attitude towards safety," he says. Serious injuries are rare. Nobody embarks on an expedition before his muscles are tuned by intensive training.

Expert instructors supervise all activities. One safety measure they teach is the limit beyond which a boy *cannot* venture on the mountains, seas or moors. "We're not trying to turn out he-men," says Sam Hayler, deputy warden of the Aberdovey school. "We just try to show each boy that he'll overcome most of the obstacles in life—if he'll have a go." The boys are not competing against each other; they are competing against themselves.



Four Outward Bound boys on a three-day, 60-mile trek in the Lake District, England

Many who attend Outward Bound look back on the experience as the most important of their lives. Stammers and stutters may disappear, along with psychosomatic asthma conditions. A shy apprentice engineer, who was incapable of putting his thoughts into words, was transformed by an Outward Bound mountaineering course. On his return, when he had to describe his

experiences to factory executives, he calmly gave them the first clear, fluent report he had ever been able to make to a meeting in his life.

"There is no question about the results—they are really remarkable," says Outward Bound's British patron, the Duke of Edinburgh, who was himself educated by Kurt Hahn at Salem and Gordonstoun. "It is hard to believe that such a complete and lasting transformation can be achieved in so short a time. But in nearly every case the cocoon of youth drops away and the true fibre of the man emerges."

Perhaps the Outward Bound experience has its most dramatic effect on problem youngsters. Early in the movement's history, Kurt Hahn thought that an Outward Bound course might channel the abundant energies of the lawless young for the common good. ("I don't like the lawless," says Hahn, "but I prefer them to the listless.")

As an experiment a few of Britain's juvenile delinquents from Borstal institutions were sent to Outward Bound. Responsibility as well as physical challenge was heaped on them; they were entrusted with delicate rescue operations.

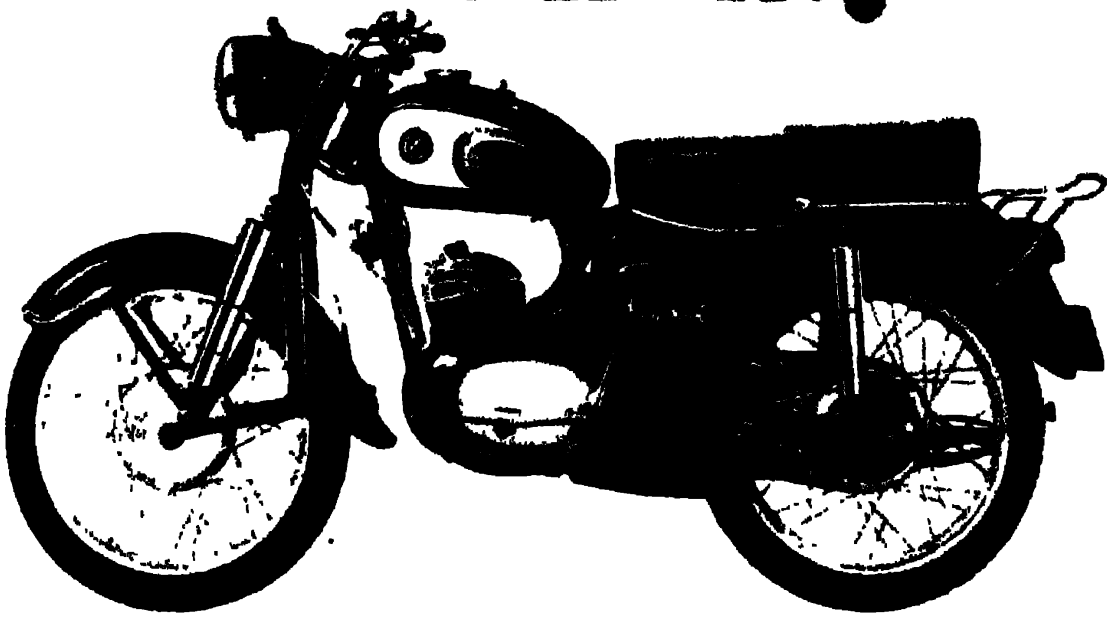
Again, success was remarkable; youths described by Borstal authorities as "unimpressionable" responded enthusiastically, and even emerged as trustworthy leaders.

Says one Borstal boy who found his manhood as he completed the school's obstacle course of expeditions, "There were moments when I thought I'd taken just about as much as I could. But then I took more, and each day my limit was extended." By the end of the last arduous three-day expedition—through snowdrifts three times his own height and across an icy river five feet deep—he said: "I felt as if I'd just conquered a city. I'd never had that feeling before."

Outward Bound is still spreading. Germany is making plans for a third school. America's Atlantic Foundation hopes to set up six more schools in the U.S.A., to operate throughout the year. Nigeria is planning a sea school at Lagos, with a touring team of instructors for adventure courses in East and West Nigeria. A group of Danish businessmen is trying to form a trust to start Outward Bound activities in Scandinavia. Visitors from other countries, after seeing Outward Bound in action, return home filled with plans to give their own youngsters a similar chance to find their manhood.

Not long ago, a young man turned up at Moray with his pretty bride; he was on holiday from his job as director of an Australian film company, he explained. His past record was no secret; he had come to Outward Bound as a Borstal boy, and after the course he had worked his way through university. "I came back," he said, "to show my wife where my life began."

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After 50 years in show business the comedian with a "cathedral of a nose" is still the life of the party

The Wild World of "Schnozzle" Durante



"I've Gotta Start Off Each Day With a Song"

By John Reddy

He doesn't *appear* on stage; he prowls on like a demented parrot, beating the air with his arms in mock fury as if the world is a dark conspiracy against him. He doesn't play the piano; he pounds it with the fury of a boxer beating a tattoo on an opponent's chin. He rasps out songs in a hoarse bass voice, interrupting himself with improbable comments, and in general devotes himself to creating chaos out of order.

The act is as old hat as Buffalo Bill's white stetson, but the public shows no sign of boredom. After breaking up pianos and fracturing audiences for over half a century, Jimmy "Schnozzola" Durante at 70 is going stronger than ever.

Condensed from Empire

Recently featured in the film, *It's a Mad, Mad, Mad, Mad World*, he is also a popular guest on American television shows, still one of the top nightclub acts, and he has a new hit record album. He remains as wild, indestructible and ungrammatical as ever. Like a good Italian Gorgonzola cheese, he seems to get stronger and better with age.

Durante is perhaps the best-loved figure in show business today. "And when you come near him," his late partner Lou Clayton once said, "it's like warming your hands at a fire." "There was a peculiar shine to this man," Gene Fowler wrote in *Schnozzola*, his biography of Durante, "and the love of him has lasted through the years." Once when he slipped into the visitors' gallery of the U.S. Senate someone spotted his familiar profile. The Senators gave him a standing ovation.

The famous team of Clayton, Jackson and Durante first burst on the scene in the antic '20's. Dancer Lou Clayton died in 1950, but high-strutting singer Eddie Jackson is still with Jimmy. Young comedian Sonny King rounds out the act. Helen Traubel, former Metropolitan Opera star, also teams with Jimmy on occasion. The first time he saw the Junoesque Traubel arrayed in armour for her role as Brünnhilde, Jimmy exclaimed, "Holy smoke! You've been drafted!" This improbable pair of singers have also made records together. "It is a pleasure," Miss Traubel reported, "to record with a great *artiste* whose voice sounds the same with bad needles."

Playing the nightclub circuits in America, Jimmy does two rowdy, knockabout acts of an hour and a half each night, singing, clowning violently and assaulting pianos. He perches side-saddle on the piano stool, his crumpled felt hat bobbing in rhythm to his razzmataz playing, and bangs away like a berserk woodpecker.

He has only a few wisps of hair left, and his eyesight is not what it was, but he scorns glasses. "I don't like wearin' 'em," he growls. "Everyone looks so much better when I don't."

Durante enjoys mingling with people. Children love him. Wherever he is, passers-by call out cheerfully; ladies sometimes rush up and kiss him.

"Jimmy suffers from an incurable case of friendliness," his friend Eugene Murphy says, "and he infects everyone he meets."

In Hollywood, where stars wear dark glasses to keep from being recognized, Durante is a happy exception. Jimmy's house, on a palm lined Beverly Hills street, is a mecca for sightseeing buses. When one pulls up in front, horn beeping, Durante often appears—perhaps from the pool-side, his wiry five-foot-seven body clad only in baggy swimming trunks, a handkerchief bound around his bald dome to

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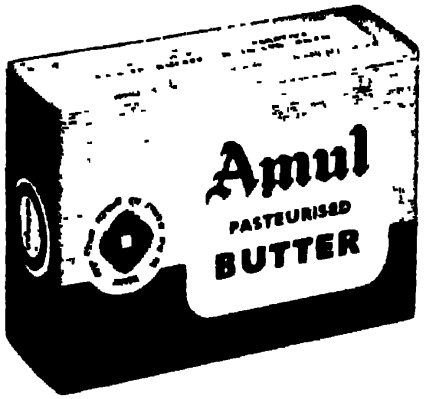
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protect it from the sun. "Howya, folks!" he greets them joyously.

At home Jimmy is surrounded by platoons of pals—usually of long standing. His friendships with Eddie Cantor, Eddie Jackson and Jack Roth, his drummer, date back to the '20's or earlier. And he is incurably sentimental about his old cronies. When Eddie Cantor had a heart attack, Jimmy visited the hospital every day. "I wasn't allowed to see visitors," Cantor says, "but Jimmy would come every day and just sit in the corridor."

One of the humblest of men, Jimmy is genuinely embarrassed by praise or honours. "I don't want nobody to put me on a pedasill," he once declared. He has conducted a lifelong battle with the English language and still shows no sign of giving quarter. The malaprops are genuine Durante. "I never mispernounce poipously," he says. "I ain't phonyin' up dem woids." When he was doing his television and radio programmes, writers tried to write garbled English. Jimmy mispronounced the mispronunciations.

Few have turned liabilities into assets with the success of Durante. Born with a nose like a rejected banana, he made it, through good-natured banter, a valuable stage prop and an object of national affection—his "cathedral of a nose," one drama critic called it. But all through childhood he was teased about it. ("I had a feelin' everybody was lookin' at me," he recalls. "It made me a shriekin' violet.") Once the scrawny Durante attacked a bully who had ridiculed him. He emerged with his Cyrano-like nose broken, which only detracted further from its aesthetic qualities.

The unkindness he suffered still colours Jimmy's attitude towards the world. "I made up my mind never to hurt anybody else," he says. "I never make jokes about people's looks, except my own."

Jimmy was the youngest of four children of Bartolomeo Durante, an Italian immigrant who ran a barber's shop on New York's tough Lower East Side. Jimmy had to go to work early, and his gravel voice was first heard publicly hawking newspapers. He never finished elementary school, but his parents saw that he took piano lessons. They wanted him to play the classics, but he preferred a new kind of rhythm called ragtime.

Soon he was pounding the piano in honky-tonks, from Coney Island to Harlem. Later he teamed up with Clayton and Jackson, and they opened their own nightclub, the Club Durant. They were an instant hit. The blasé New Yorkers of that rowdy Prohibition era had never seen anything quite like the wild antics of the trio.

Some of Jimmy's sayings, like "Dem's the conditions that prevail," and "I've got a million of 'em," became bywords. Some of the songs he wrote, such as "You Gotta Start Off Each Day With a Song"

and "Inka Dinka Doo" are still part of his act.

From clubs the team went on to great success in vaudeville and on the musical stage. But when Hollywood beckoned, it was to Jimmy alone. He wanted to refuse the studio offer, but his partners urged him to accept. Clayton offered to go as his business manager, and Jackson to work behind the scenes. "If you do," said Jimmy, "you each get a thoid of everything."

After more than 50 years in show business Jimmy remains the gentlest of men. He has never told an off-colour story. He is religious. He puts all women on a "pedasill." He drinks only an occasional glass of sherry; his vices are smoking long black cigars and playing the ponies His affection for horses is as indiscriminate as for people, and he frequently bets on several horses in the same race. In one race he was heard cheering hoarsely, "C'mon, *everybody!*" A notorious soft touch, he overlooks the frailties of his fellow man, and philosophizes: "There are more good people dan bad ones in the woild. I don't mind if a gent scratches a match on my furniture, so long as he is careful to go wit da grain."



The lively septuagenarian recently took a new lease on his personal life. A widower for 17 years, Jimmy was married in 1960 to Margie Little, a former show girl. In 1961 they adopted a baby, Cecilia Alicia, nicknamed "Cee Cee."

Jimmy is devoted to his little daughter, and has several times flown across the States and back, between nightclub engagements, just to be with his family for one night.

He likes to perch the beaming child on one knobbly knee as he sits at the piano. Enclosing her tiny fingers in his gnarled hands, he thumps the keys and croaks verse after verse of a typically Durante lullaby, "Cee Cee, We Love Ya." The performance usually ends only when Margie wrests the two year-old from her doting father's clasp and he mutters his well worn line, "Everybody's tryin' to get into da act." It still gets a laugh.

SIGN in a doctor's waiting room. "Please do not remove magazines from the surgery. The nurse will tell you the end of the story." —J. C.

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The Rewards of Caring

The more things you care about, and the more intensely you feel about them, the more alive you become

By Arthur Gordon

Once, as a small boy, I was witness to a near-tragedy. At the seaside, a woman stepped off a sandbar into deep, swift water and panicked. At least 20 adults in bathing suits watched, apparently paralysed, until suddenly a young man ran up, plunged in fully clothed, and brought the woman out.

As I described the episode later to my parents, my admiration for the young man was matched by the contempt I felt for those who failed to act. "She was drowning," I cried, "and they didn't even care."

My father looked at me thoughtfully. "The world often seems divided between those who care and those who don't care enough," he said. "But don't judge too harshly. It takes courage to care greatly."

That phrase has stayed with me through the years, because it is profoundly true. It does take courage to care, to fling open your heart and react with sympathy or compassion or indignation or enthusiasm when it is easier—and sometimes safer not to get involved. But people who take the risk, who deliberately discard the armour of indifference, make a tremendous discovery: *the more things you care about, and the more intensely you care, the more alive you become.*

If you look closely at the marvellous tapestry of living, you will see that the shining thread of caring runs through it all like a streak of golden fire. Caring or not caring can mean the difference between success and failure in a marriage, in a job, in every human relationship. "Nothing great was ever achieved without enthusiasm," said

Condensed from Guideposts



Emerson. And what is enthusiasm but passionate caring?

Even strangers will react to an intensity of caring. In London, years ago, a youngster brought up in poverty got a 12-hour-a-day job in a printshop that paid almost nothing. Passionately interested in books, but unable to buy any, this boy made a point, on his way to work each day, of passing a dingy second-hand book shop. There, if a book lay open in the window, he would stop and read the two visible pages.

One day he noticed that the book he had scanned the day before was open to the *next* two pages. The day after that, the same thing happened. He read on and on, two pages a day, until he came to the last page. On that day the old man who ran the shop came out and told him, with a smile, that he could come in and read anything at any time, with no obligation to buy. So Benjamin Farjeon—who became editor of New Zealand's first daily newspaper and, after his return to London in 1868, a well-known novelist—gained access to the world of books. And all because he cared so much about reading that his caring was visible to a kindly old man behind a dusty window.

The Bible is full of the importance of caring. The Good Samaritan is concerned about the victim of the robbers, so he acts. The other travellers, afraid that if they acted they might get into trouble, "passed by on the other side."

Conversely, what got the Prodigal Son into trouble was *not* caring. He

didn't care what he did to himself, or how his behaviour affected others. But his father cared—and kept on caring. And this was the salvation of the boy, because when he finally hit bottom, he knew where to turn. "I will arise," he said, "and go to my father."

What the Bible seems to be saying is that if you take this one ingredient out of life, nothing has much meaning. Over and over again in our workaday world we see how caring counts. A famous jeweller once sold a magnificent ruby after one of his salesmen had failed to interest the customer. Asked how he did it, the jeweller said, "My assistant is an excellent man, an expert on precious stones. There's just one difference between us. He knows jewels—but I *love* them. I care what happens to them, who wears them. The customers sense this. It makes them want to buy—and they do."

In such cases, of course, caring ultimately brings tangible reward, but the great philosophers and religious leaders have always taught this paradox: the most rewarding form of caring is caring without hope of reward. Fortunately for mankind, the world is full of people who go quietly through life performing, as Wordsworth put it, "little, nameless, unremembered acts of kindness and of love." The voluntary worker at the hospital, the neighbour who offers to take care of your children while you settle into a new house—such people have no ulterior motive and expect no recompense. They act because they care, and their actions—multiplied by millions—supply the force that keeps the human race moving upward from barbarism along the rocky path of evolution.

Sometimes recognition comes to such selfless people despite their willingness or preference to remain unheralded. Surely no thought of public acclaim crossed the mind of Dr. Frances Kelsey, of the U.S. Food and Drug Administration, when for 14 months she resolutely refused to yield to the pressures of representatives of a drug company who wanted her to approve for distribution a new drug called thalidomide. She was not convinced that it was safe, although it was being widely used in other countries. As a result, thousands of mothers were spared the tragedy of giving birth to deformed children—all because one woman cared.

The capacity for caring is in each of us, but whether we expand it or let it diminish is largely up to us. It is not always spontaneous. Socrates was referring to this when he said, "Before a man can move the world, he must first move himself." Many great artists have served long and difficult apprenticeships before they learned to love what they were doing. Many a person has had to work at a friendship before it became one.

Caring can be blocked by habits



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of resentment or prejudice, too. A doctor once described a young businessman who came to him suffering from insomnia, tension, irritability. A medical examination revealed nothing wrong, but when the doctor asked about the man's business —shoe-manufacturing—the patient flared up angrily. He hated it, he said. He had inherited it from his father, and so he was stuck with it.

The doctor wrote a prescription to help the man to sleep. Then he began to talk casually about his hobby, ancient history. He had been putting off some research, he said, into the history of clothing, including footwear. Did the Egyptians introduce the sandal, or was it the Assyrians? Perhaps, he suggested, his patient might know of some helpful reference works.

Somewhat grudgingly, the young man busied himself in the library and the doctor's long shot paid off. A flicker of interest was aroused, eventually it became a steady flame of enthusiasm, and it changed the man's whole life. He had learnt to *care* about his work.

One of the best ways to increase your capacity for caring is to express what you feel. As parents we are sometimes too quick to check our children's emotions. "Control yourself," we say sternly. "Don't give way to your feelings." But often such emotions are simply signs of caring, and if we repress them too relentlessly, the capacity for caring itself may be blunted or damaged.

I remember once at sunset sitting on a sand dune with my small daughter, watching the tide come in. It was a quiet evening, calm and opalescent. The waves sent thin sheets of molten gold across the dry sand, closer and closer. Finally, almost like a caress, an arm of the sea curled around the base of the dune. And my daughter said, dreamily, "Isn't it wonderful how much the sea cares about the land?"

She was right, with the infallible instinct of childhood: it *was* a kind of caring. The land was merely passive and so it waited. But the sea cared and so it came. The lesson was all there in that lovely symbol: the willingness to act, to approach, to be absorbed, and in the absorption to be fulfilled.

Poker Work

THE MEN teachers at my nephew's school met regularly at each other's houses, ostensibly to discuss books, actually for a friendly game of poker. When a spur-of-the-moment game was organized one Friday afternoon, the prospective host asked my nephew to deliver the following note to the classrooms of the usual participants: "The Men's Literary Society will meet tonight at Mr. Walker's house. The subject under discussion will be *Goodbye, Mr. Chips*."

Contributed by Irene Sarbey



Concluding [illegible] TREACHERY

from the forthcoming book

When the commander of the first wave of the Japanese attack saw his planes go in over the ships of the U.S. Navy—still sleeping in the morning sun at Pearl Harbour—he radioed back to his carrier task force some 200 miles away: "Tora, Tora, Tora!" (*"Tiger, Tiger, Tiger"*)*—code for the news that complete surprise had been achieved. The attack was sure to succeed. The Pearl Harbour story is told in these pages as it has never been told before. Seen through the eyes of the men who endured the assault, and those who made it, the blazing, searing action is recounted, minute by minute, bomb by bomb. Eighteen ships were sunk or heavily damaged that fateful day, and 2,403 men killed. With them went an era of warfare; Pearl Harbour brought the end of the day of the battleship. It also brought America into the war and marked the beginning of the end of the Japanese dream of conquest.*

The first instalment of Gordon Prange's brilliant book appeared in The Reader's Digest last month. His dramatic narrative is the fruit of over 16 years of research.

THE DAWN of December 7, 1941, revealed a day of exceptional splendour, even for Hawaii. In the awesome hush of morning the sunlight lay soft and golden on the green isle of Oahu with its border of fine sand. At Waikiki the long rollers broke in creamy foam as they had since time began, and along the shoreline the fronds of slim coco-palms moved gently in the ocean breeze. A man abroad at that hour might have thanked God for simply being alive in a world which for a little while wore the innocent loveliness of Eden.

But when circumstances permitted, many of the U.S. Army and Navy officers stationed there preferred to sleep. Despite the growing

Condensed from the forthcoming book, "Tora, Tora, Tora!" by Gordon Prange



The Naval Air Station on Ford Island, where Japanese dive bombers destroyed 33 U S pl
Stunned airmen look towards the smoke from the blown-up battleship "Arizona"

tension with Japan, this beautiful "paradise of the Pacific" still had a tropical, almost Polynesian rhythm, and, as was usual for the week-end, there had been social gatherings throughout the U.S. military establishment. The Sunday-morning hours were relished as a chance to get much-needed shut-eye.

Admiral Kimmel, the able and energetic Commander-in-Chief of the U.S. Pacific Fleet, was up early. Abstemious by habit, and "Navy" from keel to mast, he devoted long hours to improving the fighting readiness of his beloved ships. But this morning he had planned an early game of golf with Lieutenant-General Walter Short, Commander of the U.S. Army forces in Hawaii. The relaxation was well-merited. Admiral Kimmel

had put in a strenuous week, which reached a climax on Saturday with prolonged staff talks concerning the disposition of the fleet—that is, whether it should be kept in Pearl Harbour or sent to sea.

Sizeable chunks of it were already at sea as a result of the "war warning" message received from Washington on November 27. The next day a task force consisting of the carrier *Enterprise,* three heavy cruisers and nine destroyers had steamed out to deliver a shipment of planes to Wake Island. On December 5 a second task force (the carrier *Lexington,* three heavy cruisers and five destroyers) had sailed to reinforce Midway with more planes; and yet a third task force had gone to Johnston Island, 700 miles south-west of Oahu, for landing exercises.

Since none of the three carriers assigned to the Pacific was now in Pearl Harbour (*Saratoga* was just leaving San Diego after refitting), the ships that remained in the great base would have no air cover if they ventured out. Without this air umbrella they would be even more vulnerable on the high seas than they would be in port. So eventually the decision had been reached: the ships would remain at their anchorages, where they would at least have the protection of the army's land-based planes.

On Saturday evening Admiral Kimmel, wearing civilian clothes, had attended a small, informal dinner party with other top navy brass. Among these old friends he enjoyed himself in his own rather stately fashion, nursing his usual single drink. Although the other guests remained to play cards until midnight, Kimmel, true to form, took his leave about 9.30 and was in bed by ten.

He was never to have that anticipated Sunday-morning golf. Shortly after 7.30 a.m., as he was preparing to leave the house, the telephone rang. It was Commander Vincent Murphy, the headquarters duty officer, calling to report a disturbing occurrence.

The destroyer *Ward* had contacted a strange submarine near Pearl Harbour and had fired on it. This action was in accordance with Kimmel's orders that all submarine sound contacts in adjacent waters should be considered hostile, and the site depth-charged. Nevertheless, the incident would have to be investigated and, whatever the contact proved to be, it called for Kimmel's presence at his office. He told Murphy he would be right down.

Admiral Kimmel ordered his car for the five-minute drive to fleet headquarters. As he was waiting for it Murphy phoned again. *Ward* had become involved in another adventure, sighting a fishing sampan well within restricted waters and escorting it to the Coast Guard. While the duty officer was still on the phone to Kimmel, a yeoman rushed into headquarters shouting

that Japanese planes were attacking Pearl Harbour. Though he could scarcely believe it himself, Murphy passed the shocking news on to Kimmel. Aghast at the terrible thought, Kimmel slammed down the receiver and ducked outside to see for himself.

For what must have been the longest two minutes of his life, Kimmel stood rooted in his garden at Makalapa Heights and, still waiting for his car, watched Japanese bombers and fighters sweep over Pearl Harbour like vampire bats. He could scarcely have known it as he stood there dazed by pain, grief and horrified disbelief, but an age in the Pacific was dying before his eyes – and with it his professional career. The Japanese attack had sounded the knell of the battleship and ushered in the age of naval air power.

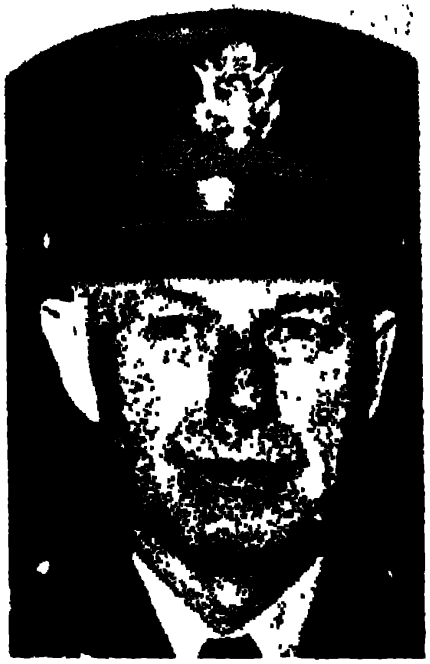
Kimmel's car now raced up, the chauffeur braked it to a screeching halt, and the Admiral scrambled in, putting on a tie at the same time. As the car roared off, a submarine squadron commander jumped on to the running board. This was no time to stand on ceremony. The Admiral and his hitch-hiker reached CINCPAC headquarters between 8.05 and 8.10.

By that time the attack was roaring full-blast. Torpedo bombers were skimming across Pearl Harbour almost low enough to touch, plunging their lethal torpedoes into the bowels of Kimmel's precious battleships, while dive bombers pounced like savage hawks on nearby Hickam Field. From above, high-level bombers rained down their deadly missiles, and fighters wove in and out of the fearful tapestry of destruction, strafing everything in sight.

The snarl of bombs, the whine of bullets, the roar of attacking planes,



Admiral Kimmel Commander-in-chief, U S Pacific Fleet



Lieutenant-General Walter Short Commander, U S Army in Hawaii

PHOTOGRAPHS: WIDE WORLD

the belching guns of the aroused defenders, which were already spitting defiance from every corner of Pearl Harbour, the acrid smell of fire and smoke—all blended into a nerve-racking symphony of noise and chaos like something out of the blackest corner of hell itself. For most Americans who were caught in the horror and bewilderment of the initial Japanese onslaught the experience was momentarily paralysing. Numb and stricken, Kimmel dashed into his headquarters, his face a mask of bleak incomprehension as he tried to pull himself together amid the tumbling ruins of his world.

Commander Logan Ramsey, operations officer of the Naval Air Staff on Ford Island, was first to announce the attack to the world. A telephoned report that a pilot had sighted a submarine had brought him to the administration building post-haste, and he was waiting for authentication of the report to order a general search by patrol planes.

Commander Logan Ramsey
"Get that fellow's number"



The Marine colour guard was just hoisting the Ford Island colours at reveille when Ramsey heard the scream of a plane diving over the station. Thinking it one of his own men, he was furious. He turned to the duty officer, Lieutenant Dick Ballinger. "Dick, get that fellow's number. I want to report him for about 16 safety violations."

The plane came very low, and both men craned out of the window to watch. "Did you get his number?" Ramsey asked.

"No," Lieutenant Ballinger answered, "but I think it was a squadron commander's plane"—such planes were at that time marked by a band of red.

Air violations by a squadron commander were unforgivable. "Check to find out which squadron commanders are in the air," said Ramsey grimly.

"I saw something black fall out of that plane," Lieutenant Ballinger told him. Even as he spoke, an explosion reverberated from the hangars.

Ramsey's face changed in swift comprehension. "That was a Jap plane — and a delayed-action bomb!" he said.

He dashed across the corridor and told all the radiomen on duty to



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Thus one of the most dramatic radio messages ever dispatched clicked over the air waves. Kimmel's headquarters sent off the same message, but the Ford Island radio went on the air first. So it was Commander Logan Ramsey who sent forth the word that woke the United States from her long sleep.

"Get Up! The War Is On!"

LIEUTENANT-COMMANDER Charles Coe, war-plans officer for Rear-Admiral Bellinger's Naval Air Staff, was in bed when the attack began. He was debating whether to get up—on Sundays he usually prepared the family's breakfast—when the noise of a dive bomber and then an explosion brought him out of bed at the double.

He knew almost at once what it was. "Get up! The war is on!" he shouted to his wife.

Flinging on a bathrobe and slippers, he helped to dress their young daughter and son, then ran with them to Admiral Bellinger's home, where the basement, being formed of the sturdy foundations of an old fort, made an ideal bomb shelter. But five-year-old Chuck had no intention of missing the excitement by being cooped up in a cellar. Delighted by the dipping planes and super firework display going on, he slipped out, with his father in hot pursuit. Very fast and elusive

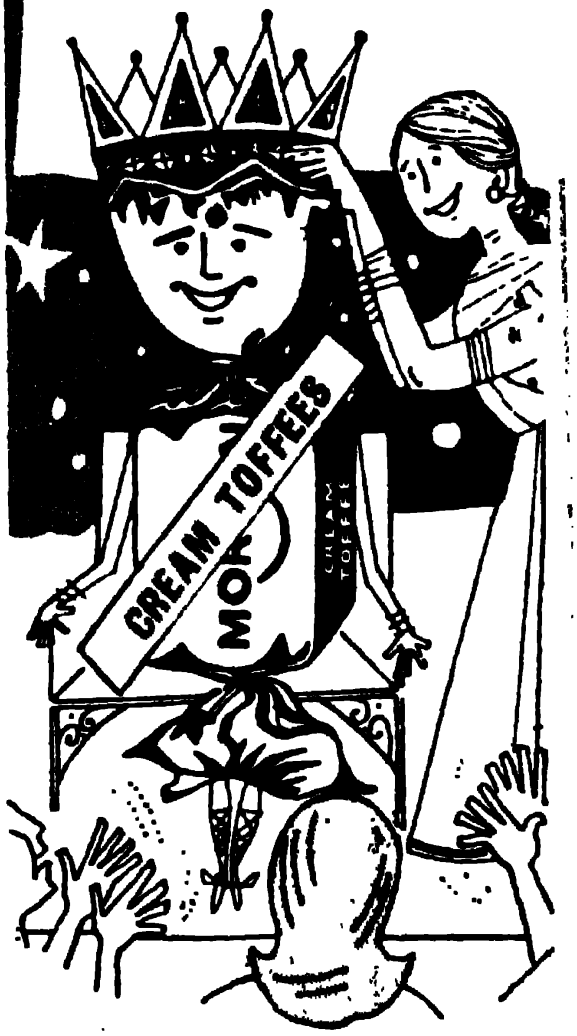
as quicksilver, he had to be chased down while Japanese planes swooped and circled, machine-gunning the area.

Coe eventually got Chuck inside the shelter again, kissed his wife good-bye and started for home to get dressed. Near his quarters he was suddenly immobilized by a terrible shock wave as the battleship *Arizona* blew up. This indescribably heavy movement of air was followed by a deafening roar, and superstructure parts, steel plating and other debris rained down on the lawn. One brick-size chunk of armour plating came through two layers of wood in his garage and lodged on the bumper of his car. Coe was lucky to be able to report for duty a few minutes later, with a khaki uniform pulled on over his pyjamas, and still wearing bedroom slippers—but in one piece.

The *Arizona* disaster completed the frustration of Captain James Shoemaker, the station commander responsible for such housekeeping facilities as offices, hangars, barracks and mess halls. As he drove to the headquarters building, dodging bomb craters right and left, he was stopped by the havoc at the sea-plane parking apron. A day earlier (at the unpleasant hour of 2 a.m.) the airmen who used it had been put through a full-scale anti-sabotage drill. This exercise had gone so smoothly that all concerned had congratulated themselves.

But Captain Shoemaker now

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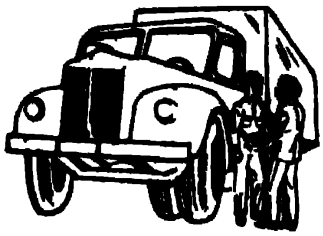
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faced the appalling spectacle of a hangar burning like a forest fire, and of fiercely blazing planes which, as protection against sabotage, had been parked wing tip to wing tip.

"Pull the good planes away from the fire," he ordered a petty officer and the few sailors who were around.

This was about all that could be done, for when the Ford Island fire brigade drove up at that moment they discovered there was no water pressure—*Arizona* had sunk on the water mains.

The Hazards of Command

When Kimmel's brilliant chief of staff, Captain William Smith, reached headquarters he found Kimmel watching the attack from the war-plans office. With him was his deputy, Vice-Admiral William Pye, Commander Battle Force, who was spattered with oil from the ill-fated *California* (having stopped to board her for a moment on his way in). Captain Smith promptly reminded the two men they should not be together here, where a single blast could kill them both and leave the fleet without a supreme leader. Accordingly, Admiral Pye moved to the other end of the building.

The communications officer, Commander M. E. Curts, arrived on the scene approximately 12 minutes after the air raid had started, and joined Kimmel and Smith. All of them stood at the window following the attack as planes zoomed down above the roof, then swung out over the

Bombers attack Ford Island: a near miss beside the battleship "Oklahoma"
(Photograph taken from a Japanese aircraft)



harbour to drop their torpedoes. The incessant anvil-clang of the explosions sent up huge water-spouts and rolling clouds of smoke that rose to blot out the sky. From their vantage point the three officers could not see the actual strikes, but speedy reports kept them abreast of the action.

They were astounded by the effectiveness of the attack, which they assumed was coming from one carrier or perhaps two carriers. They had no way of knowing what a formidable Japanese force lurked over the horizon. Many of the American officers testifying before the early investigating committees spoke of "the carrier." Some mentioned "carriers." But that these whining, screaming sky demons were coming from not one carrier but six was beyond their wildest imaginings on that Sunday.

When word came about the fate of the great battleships—the blowing up of *Arizona*, the capsizing of *Oklahoma*, the steady sinking of *California*—a groan of anguish was wrung from Kimmel's lips.

Barely ten months earlier he had taken over the command of this fleet. Could it have been only yesterday morning, less than 24 hours ago, that he had made the decision to keep it in Pearl Harbour over the week-end? Now his ships were being battered to impotency, and the sky was black from the smoke of their burning.

In the end, Smith recalls, both he and Kimmel expected the results of the attack to be even worse than they were. The island air power had been crushed, and they could see nothing to prevent all the ships in the base from being destroyed, plus the entire Navy Yard itself.

Kimmel may have hoped for the chance to avenge the memory of this terrible day, but he must have known in his heart that the débâcle foreshadowed the end of his naval career. This was the hazard of command, the chance a man took in reaching the heights. Marshal Joffre expressed it trenchantly when he once said that he did not know who was responsible for the victory at the Marne, but he knew very well who would have been held responsible if it had been a defeat.

Much as the loss of his ships grieved him, what really tore at Kimmel's brave heart was the death of his men. The United States lost at Pearl Harbour more lives than she had lost by naval action in the Spanish-American War and the First World War combined. These men were not neat rows of statistics to Kimmel. He probably knew most of them by sight, hundreds by name, and many were his personal friends. And all of them, from the seasoned commanders on their bridges to the greenest sailors in the holds, were his men, his responsibility.

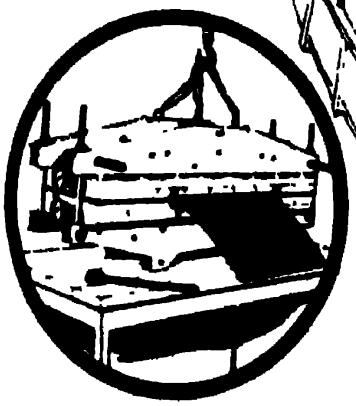
Curts was standing beside Kimmel at the window when a spent bullet crashed through the

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glass. It struck Kimmel on the chest, left a dark splotch on his white uniform, then dropped harmlessly to the floor. The admiral was not a man given to dramatics. But such was the depth of his sorrow and despair that he murmured, more to himself than to Curts, "It would have been merciful had it killed me."

Hour of the Rising Sun

THE FIRST wave of the Japanese attack employed 183 planes—51 dive bombers, 49 high-level bombers, 40 torpedo planes and 43 fighters. It was led by Commander Mitsuo Fuchida, 39-year-old veteran of the war in China, a natural-born pilot whose warmth and personal magnetism commanded almost idolatrous loyalty from his men. In less than ten years Fuchida would use this ability to win men's hearts in quite another fashion, sheathing his sword for ever to follow the Prince of Peace as a Protestant minister of the gospel. But on this Sunday morning his every effort was bent on killing and destruction.

By today's standards the bombers in Fuchida's air armada were primitive, slow and vulnerable. They had a maximum speed of slightly more than 200 m.p.h., carried one bomb only, and were innocent of armour plating or self-sealing tanks. But they bore one supreme weapon. In the cockpits sat the cream of Japan's naval pilots—the best in the world on that particular morning, the *best-trained, the most combat experienced.*

Such men manned the fighters, too, and the fabulous Zero was the hottest aerial package the Japanese produced in the war. The Zero carried scarcely any armour, but violent death blinked from the two 20-mm. cannon in its wings and two 7·7-mm. machine-guns in its nose. And its speed, climb and manoeuvrability came as a nasty surprise to American pilots.

Most destructive of all were the torpedo planes, which were commanded by Lieutenant-Commander Shigeharu Murata, an old China combat hand at 32. No student, Murata had an unimpressive record at the naval academy, but once he began flight training he came into his own. He was the perfect physical type for a pilot—wiry, graceful, lizard-quick in all his movements—and he became an ace of aces.

This swaggering little extrovert had unflinching nerve and impish good humour which bubbled out of him like water from a spring. He was to meet his death at the Battle of Santa Cruz Islands on October 26, 1942, making one of his famous torpedo runs against a U.S. ship. But as he flew his plane to Battleship Row that morning he had a boundless, arrogant faith in his ability to outface danger and do the job well.

The often-rehearsed timing of the attack was marred by a slight



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slip-up. Assured by scout-plane reports that the Americans were still asleep, and by the Honolulu radio, which continued to broadcast popular music, Fuchida fired a single flare to signify "surprise achieved." This meant that the torpedo planes were to go in against the U.S. ships first, since they would then meet no opposition and have targets unobscured by smoke or gunfire. But one fighter-group leader, whose vision had been fleetingly obscured by a cloud, failed to acknowledge the signal, so Fuchida fired another flare to alert him

Two flares was the signal that surprise had *not* been achieved—in which case the bombing planes were to attack first. Misreading Fuchida's intention, Lieutenant-Commander Kakuichi Takahashi, the tense and eager dive-bombing leader, dashed in to attack. Murata knew that Takahashi had misinterpreted the signal, but since he was unmistakably leading his bombers into position to begin their bomb runs, Murata had no choice but to drive his torpedo planes into the warships as quickly as possible.

In the end, the fact that the bombers attacked slightly ahead of the torpedo planes made little difference. The element of surprise was so complete and so paralysing that there was little effective opposition to either. In the perhaps two minutes of quiet that remained after the mixed-up signals were fired and before the first bomb was dropped, Fuchida seemed to sense that this would be so.

For he found the island scenes unfolding beneath his speeding plane singularly reassuring. Beneath him, exposed U.S. fighters and bombers stood in neat rows along the airstrips like miniature battle toys on a nursery floor. Pearl Harbour, too, lay quiet and peaceful, bathed in the soft colour of an exceptionally beautiful dawn. Over the whole island hung an atmosphere of Sabbath peace.

Always on the watch for omens, Fuchida reflected that never had the symbolic Rising Sun appeared more auspicious for Japan.

Havoc at Wheeler Field

All 51 dive bombers and all 43 fighters had been assigned to the task of destroying Hawaii's air power. With split second timing they broke away from the other planes and, shortly before the first bomb was dropped on the ships, simultaneously attacked Wheeler Field, Hickam Field, the Naval Air Station on Ford Island, and other air installations.

At Wheeler Field, which constituted the most dangerous nest of U.S. fighters (more than twice the number Fuchida mustered, divided between P-40's and P-36's), the commanding officer, Colonel William Flood, had taken practical measures to protect his planes. He had rushed the building of more than 100 U-shaped earth bunkers,

about ten feet high, in which to disperse them. But this morning, despite Flood's uneasy protests, the planes were not in their bunkers. Instead, at the prompting of General Short, who was haunted by fears of sabotage from local Japanese, they were lined up in neat rows in front of their hangars and surrounded by a heavy armed guard.

It was almost eight o'clock when 25 screaming dive bombers swooped down on Wheeler Field, dropped their lethal eggs, then circled and returned to strafe the massed planes, the hangars and barracks. Zeros joined the bombers and together they proceeded to tear the base apart, sometimes flying so low that the Japanese pilots later found scraps of installation wires wrapped around their landing gear.

Almost as soon as one of Wheeler's planes was hit, it became a fountain of flame. Then the craft next to it would ignite and blaze away until the whole area in front of the hangars seemed like a flowing river of fire.

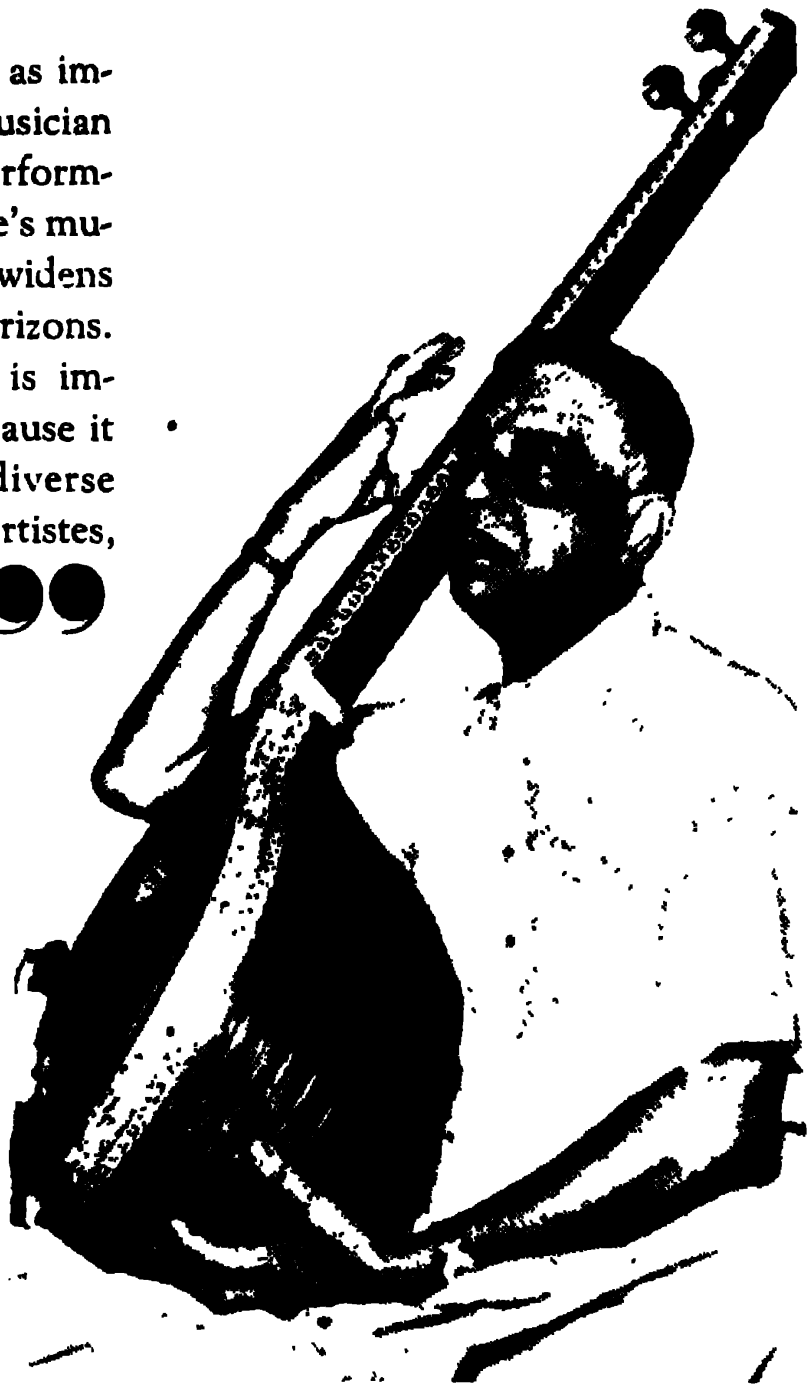
Surprise attack or not, most of the Japanese pilots had expected they would be flying straight to their doom. Like many of his comrades, Lieutenant Tamotsu Ema, 28-year-old dive-bomber pilot from the carrier *Zuikaku*, had written out his will the evening before. He scarcely expected to see his pretty young wife and month-old daughter again. This was his first combat experience, and he had pictured the air filled with piercing flak and buzzing with American fighter-interceptors. As he flew over the target he found his easy access to it hard to believe. There were no U.S. planes in the sky, and little ack-ack. Although some of the dive bombers returned to strafe four or five times, not one was shot down over Wheeler Field. "It was more like a practice run than actual combat," Lieutenant Ema said.

Brigadier - General Howard Davidson, the big, good-looking Texan who commanded the 14th Pursuit Wing, was in his bathroom shaving when the bombs began falling. He rushed outside, saw the Japanese planes ripping Wheeler Field apart, and was horrified to observe his ten-year-old twin daughters, Frances and Julia, skipping gleefully across the lawn.

Completely unaware of danger, they were busily collecting the fascinating shining objects that were bouncing all round them—empty cartridges from the attacking planes. Davidson helped his wife to snatch the children indoors, then dashed to his command post to direct resistance. Shouting orders like an enraged Tartar, he worked feverishly with his officers and men disengaging undamaged planes from those already on fire and pushing them to safety.

"We did not have the guns loaded," Davidson told the Roberts Commission, appointed on December 16, 1941, to investigate the Pearl

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Harbour disaster. "That was our biggest difficulty, especially since one of the hangars where we had our ammunition stored was on fire, and the ammunition was on fire, too."

Before the attack was over, several hangars were ripped open and burnt to charred skeletons. Bombs slammed into the men's barracks, killing several hundred on the spot and badly wounding others. Many struggled from their quarters, bleeding, moaning, dying, and yet even in their agony helping one another towards safety.

Although Wheeler Field was a camp reeling with stunned and bewildered personnel, it fought back. "Officers and men stood against that withering hail of bombs and bullets and fought their guts out," said Colonel Flood.

But the odds were too one-sided. When the bombers and fighters winged away from their bloody orgy of bombing and strafing, Wheeler Field was a panorama of havoc and ruin: with a boiling cloud of smoke and fire climbing skyward and westward with the wind. It was also a hideous junk-heap of plane wreckage. For the Japanese had knocked out one third or more of General Davidson's P-40 and P-36 fighters.

"I'll Send You a Liaison Officer"

Hickam Field, which housed some 70 bombers, also slumbered in the early-morning sunlight. Its B-17's, the new four-engine "Flying Fortresses," were much feared by the Japanese because of their range and striking power. But there were only 12 of them, and all the bombers, like the fighters at Wheeler Field, were parked tightly together in front of their hangars, as helpless as newly hatched birds in the nest.

Suddenly a deafening roar of engines split the morning air, and a whole cloud of planes sped down from the north. Quickly the oncoming aircraft divided up and zoomed off in various directions, one section of nine dive bombers moving towards Hickam Field itself, with the mission of destroying it.

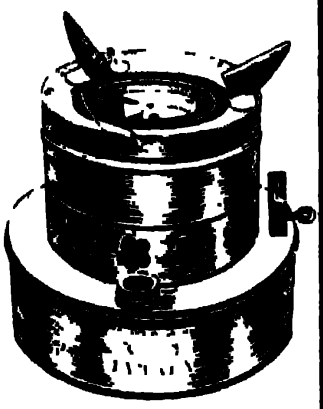
Major-General Frederick Martin, commander of the Hawaiian Air Force, had recently moved his headquarters to Hickam Field. His chief of staff, popular and able Colonel James Mollison, who was shaving when the bombs started exploding, hurriedly dressed and ran to the office. There he at once telephoned his opposite number, Colonel Walter Phillips, General Short's chief of staff, and told him they were under Japanese attack. Phillips simply could not believe it.

"You're out of your mind, Jimmy," he replied, to the best of Mollison's memory. "What's the matter? Are you drunk? Wake up! Wake up!"

The sorely-tried Mollison gritted his teeth and held out the receiver so that Phillips could hear the crash

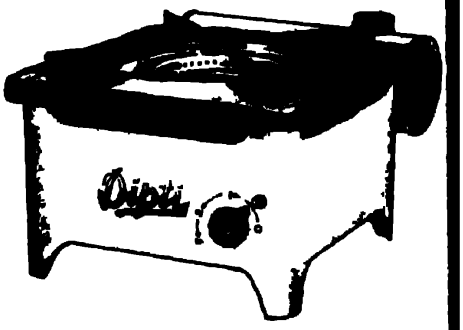
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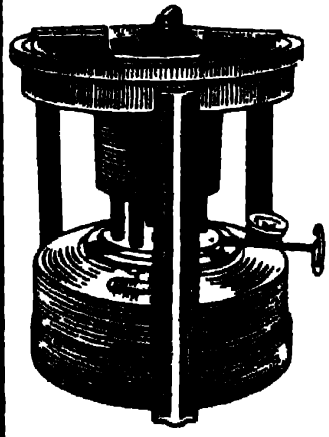


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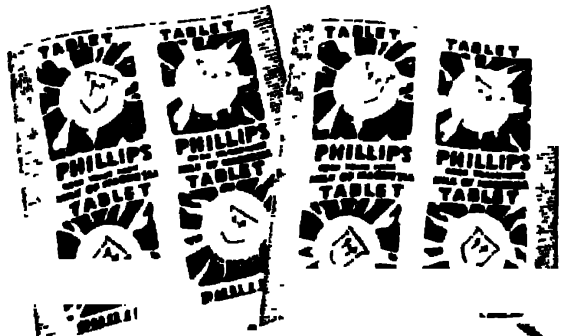
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of the bombs. Phillips at last took in what was happening.

"I can hear it," he said. "I can hear it. What do you want me to do?" Then, inspired, "I'll tell you what, I will send you over a liaison officer immediately."

At this precise moment the ceiling collapsed—a fitting emphasis for Mollison's amazement and frustration.

General Martin arrived at the headquarters approximately ten minutes after Mollison, and automatically started upstairs where the offices were. But Mollison, who meanwhile had improvised a working area on the ground floor, wisely halted him.

"General, don't go up there," he said. "It is too dangerous. If you stay down here at least you will have two ceilings between you and the enemy."

Martin recognized the good sense of this and took over Mollison's desk, while another was rolled in for the chief of staff.

Mollison was deeply concerned about his chief. Never in good health, Martin was obviously a sick man that morning. In fact, an old ulcer had broken open, and he was haemorrhaging internally. His ashen face and haunted eyes indicated that he was in a state of shock. But his subsequent matter-of fact evidence to the Roberts Commission showed that, however crushed in spirit, he was still an airman.

"Our ambition at the time was to

try to get the carriers if we possibly could," he said. Note that he spoke of carriers in the plural. Even at this early stage he realized that he had to deal with more than one nest of hornets.

"I called up Rear-Admiral Bellinger, head of the local Naval Air Forces, on the field phone," Martin's testimony continued. "As you know, the Navy is responsible for the search. The bombardment was so heavy we could hardly hear each other. He said he had no information whatever to give me any light as to which direction to go to find the carriers."

Not that it mattered. Neither Martin nor Bellinger had enough planes left to challenge Japan's armada.

Eight months earlier, on March 31, 1941, the two men had published a joint report pointing out the likelihood of a surprise Japanese air attack from carriers brought within 300 miles of the island. Such an attack could be forestalled, they said, by regular patrols of long-range planes. The planes for this task had not been forthcoming. Did either of them now remember that famous Martin-Bellinger Report, so brilliant, so accurate—and now so ironically, tragically useless?

Brave Men Under Fire

On Ford Island, only two or three of Admiral Bellinger's naval patrol planes were left in shape to take off, despite valiant efforts to

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repair damaged craft—efforts which at first ran foul of rigid service procedures.

Commander Ramsey recalls that an old paymaster, in charge of the depot where spare parts were stored, even during the attack could not shake off the conscientious habit of years.

"I won't issue supplies without a signed receipt," he said flatly.

Whereupon Admiral Bellinger lost his temper, one of the few times on record that this most good natured of men blew up. He rounded up some Marines carrying bayonets and led them to Supply Stores with simple directions: "Boys, take what you want."

In many cases, however, men rose instinctively to the crisis Mollison remembers in particular one man on Hickam Field. He was an old punch-drunk ex-prize fighter who spent his time mowing lawns and working on other such tasks, as he had proved unfit for anything else. But on Pearl Harbour day he reacted with tremendous courage. Somehow he got hold of a machine-gun and fired it at the attacking planes, first from his hip, then from his shoulder. Of course this unequal contest could have only one ending. The man was killed. But everyone on Hickam Field remembered his valour under fire.

A few minutes before the attack Captain Brooke Allen, leader of one of Hickam's bombing squadrons, had received a telephone call from the mainland. It was his wife Helen, six months pregnant, phoning from her parents' home in Florida, where she had been staying since late summer. She was worried about the bad state of affairs in the Pacific and wondered if and when she should return to Hawaii. Captain Allen told her not to come to Honolulu until things had cleared up. He would then make the travel arrangements and let her know.

Shortly after he hung up, the air was rent by a series of rocking explosions. Recognizing at once that the Japanese had struck, Allen had but one idea. Get his B 17's into the air and fight.

As he sped to the operations area in furious haste, he found the Japanese "knocking hell out of everything." One of the first bombs destroyed a repair hangar, another exploded in a supply building, sending myriad nuts, bolts and wheels hurtling through the air. As at Wheeler Field, the other ranks suffered the worst carnage. A bomb fell right into the dining room of the huge 3,000 man barracks while many were at breakfast. Men poured outside in anguished bewilderment, bleeding, moaning, and dragging the wounded with them.

"For Christ's sake, what's going on?" they asked.

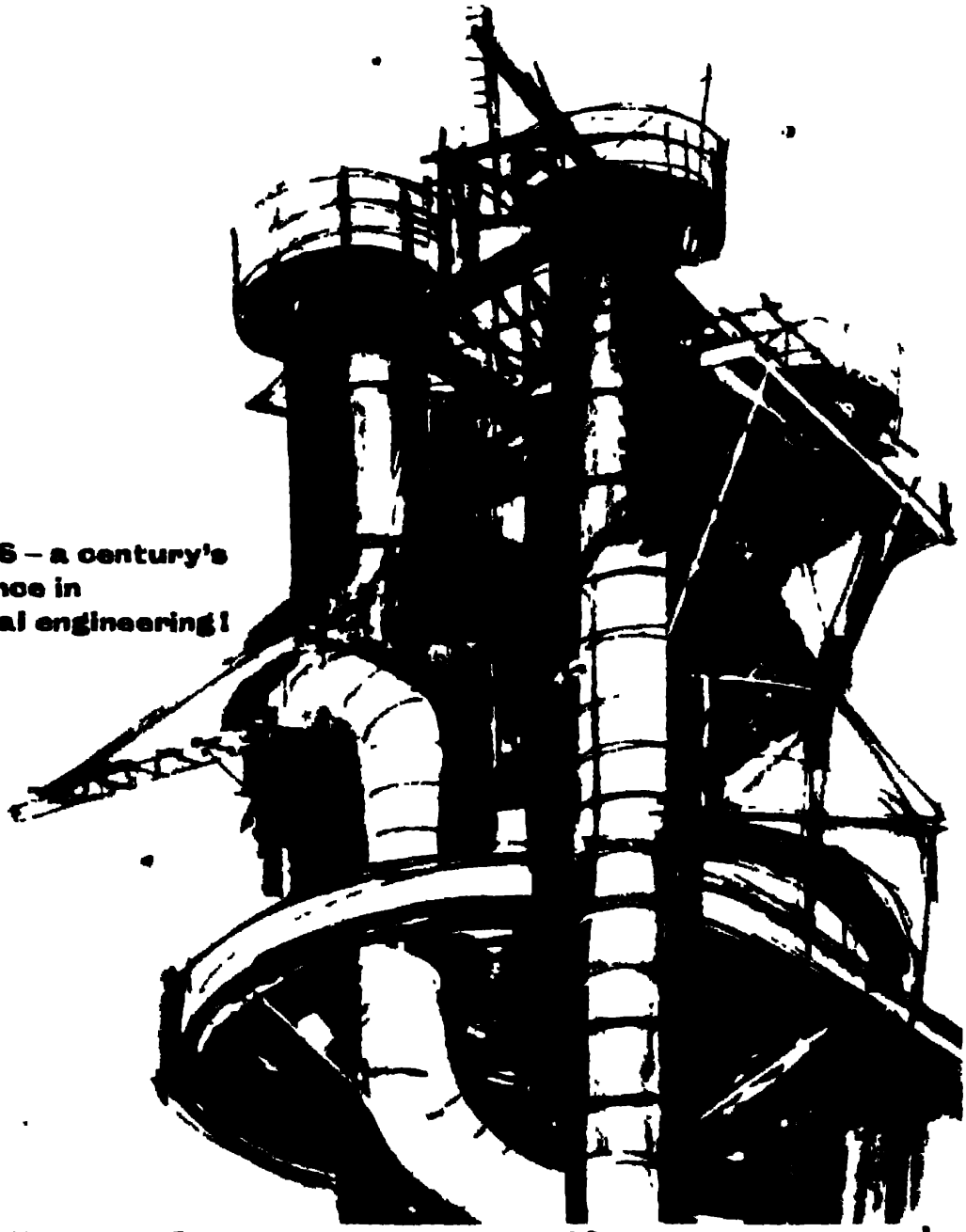
Many would never know. For a Japanese fragmentation bomb now fell among them as they gathered

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outside, and mangled bodies frightfully.

Other bombs tore into the water mains, lifting geysers ten to 15 feet high, and struck Hickam's fire-fighting equipment, making it almost impossible to stem the inferno. When Captain Allen arrived at the hangars, hot streams of incendiary bullets had already turned bomber after bomber into crackling flames.

Amid all the confusion Allen jumped into the cockpit of one of his B-17's and tried to get the plane into the air. He managed to get three engines started but could not turn the fourth. However, he taxied his plane away from the burning hangars into the open area. Then marauding Zeros joined the dive bombers in strafing runs until it seemed that all the hornets of hell had been loosed, and for the moment he had to give it up.

But one vignette of the action indelibly impressed itself on Captain Allen's memory. As he was running to the B-17's he had seen an airman climb into the turret of a B-18, face the full fury of the attack and "fire like hell at the Japanese" with his machine gun. All the while the B-18 was on fire. Allen did not know this brave man. Nor was he sure whether the lad lived or died.

Twelve B-17's, *en route* to the Philippines from the United States, had been scheduled to stop at Hickam Field for fuel and servicing. Completely unaware of what awaited them there, the pilots were now winging their way into the inferno.

The flight had already proved a singularly ill-starred one. For the expected arrival of this flight had caused the Americans on the ground to disregard the one clear warning, by radar, which might have saved the fleet.

An hour earlier, Private Joseph Lockard and Private George Elliott of the 55th Signal Aircraft Warning Service had been manning a radar station near Kahuka Point, on the northern tip of Oahu.

Suddenly there had been pulses on the radar screen so strong and vivid that at first Lockard thought something was wrong with the equipment. He checked to see, but there was not.

Deciding that it must be a flight of some sort, he asked Elliott to plot it. "We picked up the flight at 136 miles," Lockard tells us, "and when it got to 132 we called the Information Centre."

"Well, don't worry about it," said Lieutenant Kermit Tyler, the young officer then on duty at the Centre. Tyler knew that a flight of B-17's was due from the mainland, and assumed that it was these planes that had been picked up by the radar station.

It was then about 7.15. Fuchida and his powerful aerial armada were 45 minutes away. There was still time for American forces to be alerted, for the pilots to

jump into their planes and go out to meet the invader, for the sailors to man the ships guns and make short work of Myatt's awkward torpedo bombers It was the first chance for U S forces in Hawaii and it eluded them

Now the B-17s under the command of Major Truman Landon were flying into an unsuspected hell fire of destruction They were at the tail end of a long, tiring flight 14 hours and were flying separately instead of in formation Some were low on fuel All were unarmed their guns packed in cosmoline

As they broke through a cloud bank to approach Oahu they encountered a group of six to nine planes flying directly at them from the south "Here comes the U S Air Force out to greet us," thought Landon But at almost the same instant the planes dived in on them with machine guns blazing Then the U S pilots could see the markings of the Rising Sun A voice over the intercom barked 'Damn it, those are Japs!

'Landon immediately took evasive action and fortunately lost the Japanese flight in the clouds Soon he was over Oahu and now he could see Hickam Field below him smoking and boiling like a hot cauldron He reported to the control tower then made a wide turn to start down from 6 000 feet



"You have three Japs on your tail," the tower warned.

Landon looked back and, sure enough, they were hanging on to his plane like bats to a cliffside, pouring in bullets port and starboard. To make matters worse, U.S. forces on the ground were also slamming shot and shell at him. Even so, he continued his descent.

It is a tribute to the U.S. B 17 pilots that they were able to land at all under such conditions. But land they did. One managed it at Bellows on the south east coast, two at the short strip at Haleiwa, on the north west shore of Oahu. Others, like Landon, came down right on Hickam Fie

Fuchida Assesses the Damage

THE AIR SCENE changed now, and Japanese fighters and bombers no longer buzzed around like bees. Except for a few stragglers, they had turned back towards their carriers.

They did not fly back in mass formation. Instead, as each unit finished its task, it rendezvous'd at a point about 20 miles north-west of Oahu. The bombers circled there to pick up any waiting fighters (which, having weak radios and no navigators, could easily lose their bearings over water), then guided them to the mother ships

In case U.S planes might follow them and thus locate the task force,



elaborate deception tactics were employed.

"My unit from *Soryu* took a decoy route back to the carrier," said Lieutenant Sadao Yamamoto, an observer in one of Fuchida's high-level bomber groups. "We headed westwards from Oahu and flew 30 miles before turning northward again. In fact I thought we might get lost, and I worried about it."

Chief Flight Petty Officer Juzo Mori, a torpedo pilot from *Soryu*, stated: "To conceal the position of our carrier, as we had been instructed to do, I turned and took a course due south, directly opposite to *Soryu's* true position."

The torpedo planes were the first to leave the battle area. Once their torpedoes were loosed, the pilots picked up a fighter escort and made for the rendezvous point. An east wind had given them ideal attack conditions, for smoke from bomb explosions and anti-aircraft fire had blown across Ford Island and away from their low-flying torpedo planes.

This had left them a perfect view of the target, whereas a west wind would have blown the smoke into their faces and concealed the ships by a black pall. As they winged northward they knew they had scored huge damage against the U.S. Fleet.

The dive bombers could gloat, too. At about 8.10 Lieutenant-Commander Kakuichi Takahashi radioed the task force: "Bombed Ford Island, Hickam and Wheeler. Terrible damage inflicted." His loss had been one dive bomber. And the fighters had lost only three planes, while their assaults on U.S. air power had been deadly. At Bellows Field, for example, where a number of U.S. pursuit craft tried to get into the air, the Zeros shot them down almost as fast as they moved out for take-off.

As for his own high-level bombers, Flight Leader Mitsuo Fuchida had drilled them endlessly in accuracy. There was only one shot at the enemy per plane, and it had to count.

"Not a single bomb is to be dropped carelessly," he had told his groups. "If necessary, make two, three, even four runs over the target." They had faithfully followed his teachings, and Fuchida himself had made three runs over *California* before he was sufficiently satisfied to drop his bomb.

Unlike the others, Fuchida continued to circle over Oahu, trying to assess the damage inflicted, for he was anxious to bring back a full report.

The anti-aircraft fire, especially from the ships and dockyard areas, had by this time become so strong that it was difficult to penetrate the veil of smoke and fire to see below. But by persistent manoeuvring Fuchida managed to size up the situation.

The torpedo and bomb attacks

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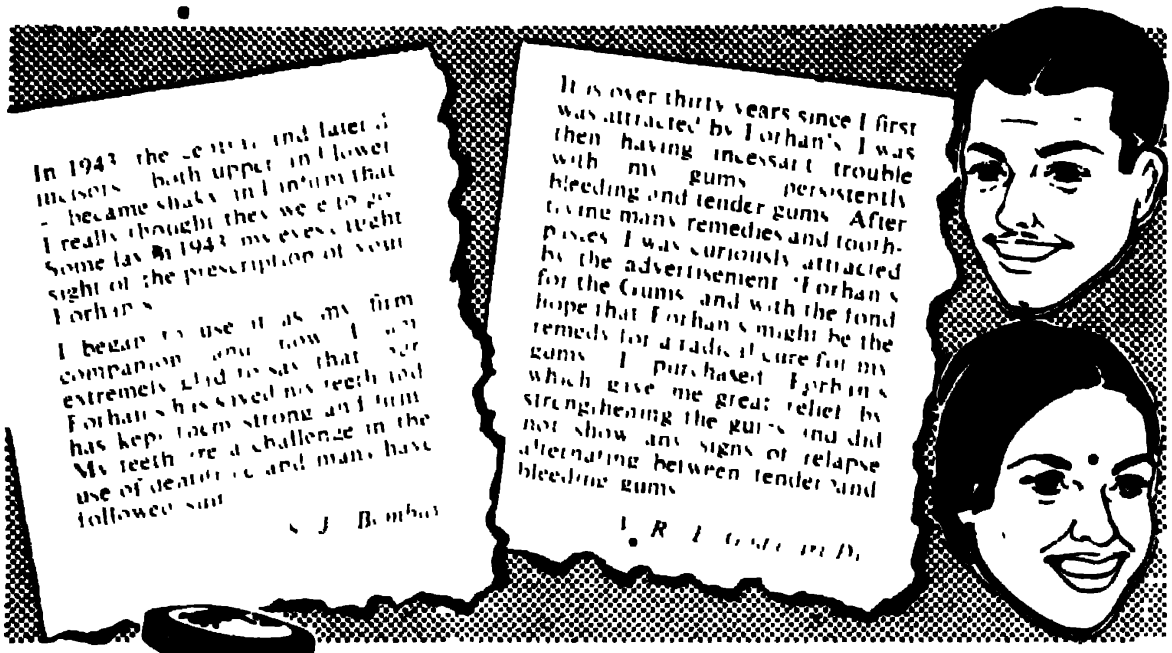
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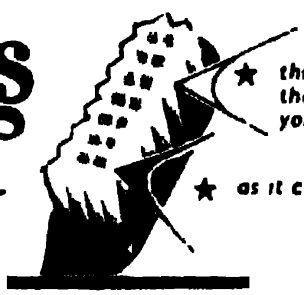
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had turned the harbour into a charnel house. Everywhere men were scrambling down side chains, running to and fro along the decks, jumping overboard, swimming towards shore—all trying desperately to escape the choking oil and creeping flames that threatened from every direction. Nearly all the battleships seemed to be sinking, heavily damaged or on fire.

At 8.55, Fuchida heard the attack signal of the second wave, which was now over the eastern side of Oahu.

Before he turned back to his carrier, he saw the newly-arrived bombers flying over Ford Island. He had planned to give target instructions to this second wave, but the dispatch with which it began to perform its mission made such orders unnecessary.

As Fuchida winged his way back to *Akagi*, aglow with satisfaction, he had no way of foreseeing the ultimate effect of the terrible thunderbolt he had hurled. That he had awakened a slumbering giant and thus irrevocably changed the course of Japanese history, he did not once suspect.

The Second Wave

ABOUT HALF an hour elapsed between the end of the first-wave attack and the onset of the second —time enough for desperate men to clear the debris from runways, set up machine-guns and ack-ack emplacements, patch up the remaining airworthy planes, and otherwise prepare to meet the next blow, which was expected any moment. Every military installation on Oahu, during this brief grace period, was an ant-heap of feverish activity.

The frantic work stopped when a second armada—170 planes this time—plunged down from the north. Again the Battle of Oahu roared in unmitigated fury: bursting bombs, screaming planes, spitting guns, whistling steel, flying debris, gutted hangars, twisted ships, burning buildings, wounded and dying men, everywhere violence, explosions, wreckage. And smoke—acrid, foul, so black and thick that the Japanese pilots could not bomb accurately.

Again U.S. forces fought courageously against punishing odds. And now, lacking the all-important element of surprise which had brought the first wave through almost unscathed, the pilots of the second wave soon realized they were in a real fight. For anti-aircraft fire pounded away at them, hot and heavy.

Lieutenant Fusata Iida, 28-year-old fighter pilot who led the Third Air Control Group from *Soryu*, was a short, handsome man with a warm personality and a ready wit. Aggressive, hard-drinking and popular, he had survived three years of combat in China. But when he took off from the carrier that morning he had seen his last sunrise. He had, in fact, about one hour to live.



Over the naval air base at Kaneohe, flying shrapnel from the defenders' guns rocked his Zero. Fragments cut into his fuel tanks, and petrol began to spurt out in a long white spray. As his plane dropped precipitously, Iida must have remembered the advice he had so often given his men. He had repeated it only that morning:

"The most important thing for a soldier who is a true samurai is his last determination. If, for instance, I should receive fatal damage to my fuel tank, I would aim my plane to effect the greatest destruction and, without thought of survival, would throw myself into the target."

True to this samurai code, Iida now signalled his group to disband formation, pointing first to himself and then to the ground to make clear his intention. Then he plunged into the enemy with guns blazing and throttle open.

"The last I saw of Iida," Lieutenant Iyozo Fujita recalls, "was when he began his crash dive, his plane hurtling straight downwards, into a flaming hangar on Kaneohe Air Base."

Iida was not the only Japanese airman to greet the dark angel by such suicidal tactics. At Hickam Field, at least one pilot, and possibly a second, followed Iida's spectacular manner of leaving the world—a grim foreshadowing of the deadly Kamikaze attacks to appear later in the war.

The second-wave assault on

Battleship Row was made solely by dive bombers, high-level bombers and fighters, since the lumbering torpedo planes stood no chance against an alerted enemy. The attackers had been instructed to concentrate on the badly damaged ships and destroy them beyond salvage. But the black, oily smoke arising from such ships made it impossible to see them, so the bombers had no choice but to home in on whatever vessels had so far escaped unscathed or with little damage.

During the attack several bombers spotted the 29,000-ton battleship *Nevada* trying to escape to the open sea, and pounced on her like falcons on a fat goose. As she moved towards the outer channel she was barely limping along, for a torpedo from the first wave had already ripped a hole in her the size of a house—45 feet long and 30 feet high. It seemed a golden opportunity to seal off the Pearl Harbour base by sinking this mass of steel in the main channel.

It might take months to remove such an obstacle from the channel, and meanwhile whatever ships of the Pacific Fleet were not locked in would be locked out. The vessels at sea would find themselves cut off from their mother base, from refuelling, revictualling and repairs. Little wonder that the dive bombers went after the stricken vessel with triple vengeance.

They scored at least five direct hits and two near misses on the ship,

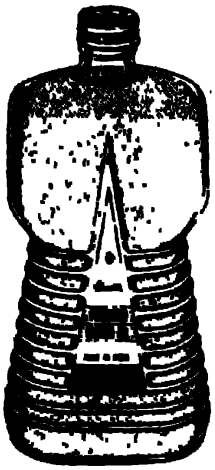


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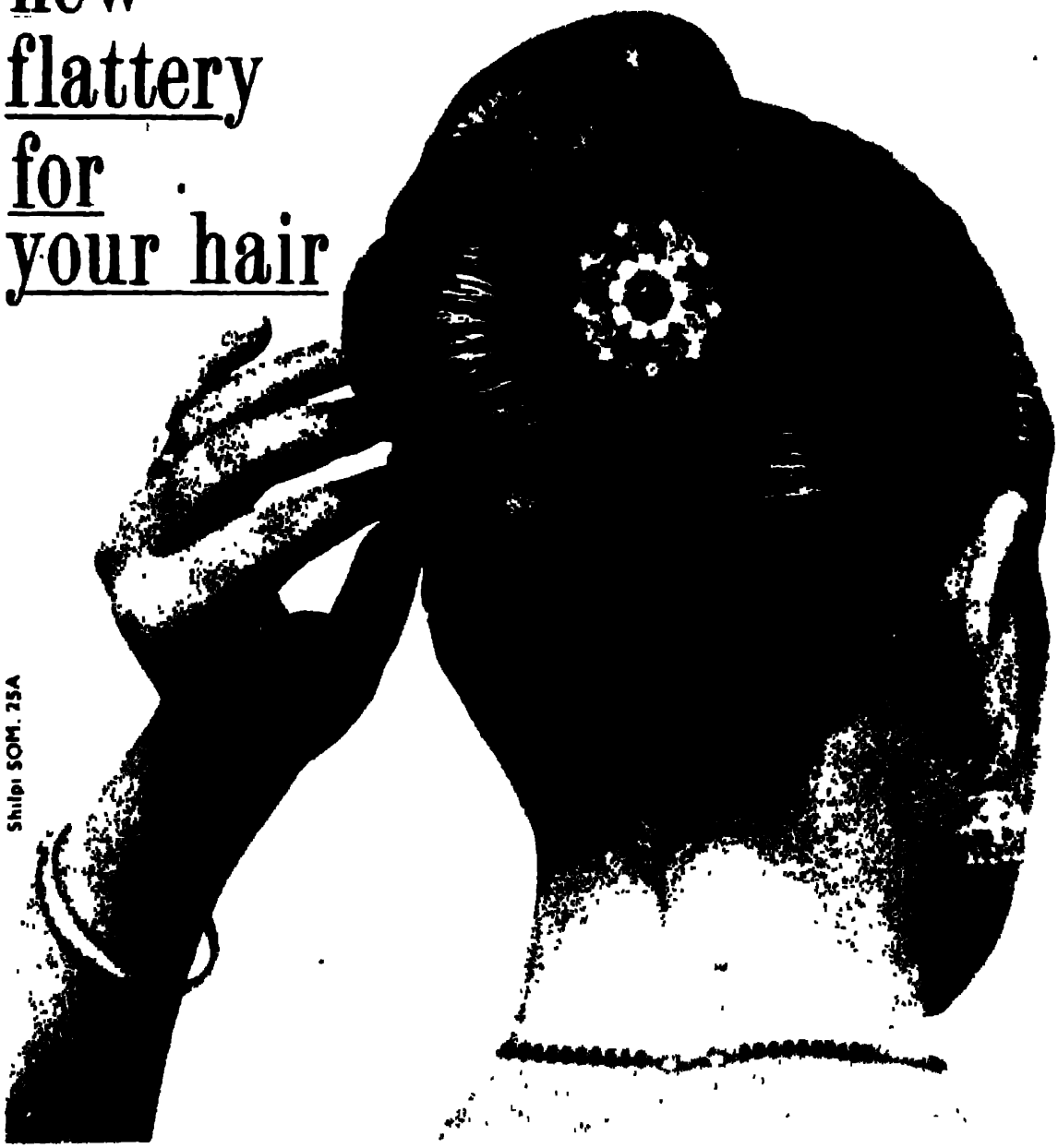
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but somehow could not sink her. Rear-Admiral William Furlong, who had been in on the fight from the very first bomb, sent two tugs to get her out of the channel. *Nevada* still had some power of her own, and with the tugs' assistance crossed to the other side of the channel, where she was grounded.

The bombs had started several fires and had also cut her fire mains so that she had no water. But the tugs put out her fires, and *Nevada*, which was known as the "Cheer Up Ship," lived up to her name by being one of the first of the Pearl Harbour casualties to go back into action.

By 9.45 the second attack wave had completed its mission. It withdrew, abandoning Oahu's skies to the flames and smoke of the holocaust below. Like the first wave, it had expended its wrath on U.S. planes and air installations as well as on ships.

It is difficult to assess the precise destruction each attack wave inflicted on Hickam and other air fields, but one point is unmistakably clear: U.S. air power in Hawaii had suffered losses as great, relatively speaking, as had sea power. Perhaps greater.

The Lost Opportunity

THE FIRST-WAVE Japanese planes began arriving back at the task force about ten o'clock, the second wave about two hours later. The weather had worsened, and high waves and tricky winds made landing difficult. Some of the pilots, full of haste and tension, landed "hot" like ducks. Mishaps were many, and a few badly damaged craft had to be pushed into the sea to clear the decks for the fuel-short planes circling impatiently overhead. Returning to *Soryu*, Lieutenant Sadao Yamamoto was faced with the prospect of landing with one tyre shot away. But his friends on deck obligingly shot the other tyre and Yamamoto jarred home safely.

On *Hiryu*, medical officers waited on deck ready to rush the wounded to sick bay. The numerous flak scars on the arriving planes made them fear the worst, but astonishingly not a single pilot in either wave from *Hiryu* was hurt. Other ships were less fortunate. On *Akagi*, a badly wounded petty officer died that night and was buried at sea.

After returning to *Zuikaku*, Lieutenant Masao Sato dropped into the radio room and listened to messages from two bombers that had lost their way. They requested the position of the task force, but the ships were maintaining strict radio silence and could not answer. Finally the bombers radioed that they were running out of fuel and were going to crash into the sea. "*Banzai, Banzai, Banzai!*"

But losses were relatively insignificant—29 planes in actual combat, a few others lost at sea or in smash-up landings—and more than 300 craft returned safely to the task

force. The attack had succeeded beyond the wildest hopes of the Japanese, and on each of the six carriers the airmen were almost hysterically jubilant.

On *Akagi*, flagship of the fleet, the elation and excitement were electric. It was after 11 when Fuchida's pilot swooped down on the rolling deck and braked his heavily riddled bomber to a halt. Commander Minoru Genda, who was in charge of the whole air operation, was waiting when Fuchida stepped on deck and exultantly wrung his hand.

After the two men had exchanged congratulations, Genda rushed back to the bridge while Fuchida sought out various group leaders at the reporting table.

This was set up on the flight deck beside a huge blackboard sketch of Pearl Harbour, on which all the known ships there were located. As each returning pilot was interviewed, the attack results were estimated and marked down. Flashed information from the other carriers helped to fill in the details, which soon formed a picture of vast devastation. Nor could the carefully restrained wording of these messages conceal the fact that all the air groups were champing to go back and finish the job of destruction.

It was a golden opportunity, which the Japanese were to let slip. When Admiral Chuichi Nagumo, Commander-in-Chief of the task force, summoned him to the bridge to report on the raid, Fuchida wanted desperately to mount a final mop-up attack on the U.S. base. He told the assembled staff officers that all evidence pointed to at least two American battleships sunk and four seriously damaged. He also emphasized that his pilots had achieved undisputed control in the air, and he concluded that, except for heavy anti-aircraft fire, the Americans had been stripped of their ability to retaliate.

Nagumo beamed with satisfaction and dismissed Fuchida with warm praise for a job well done. But it soon became obvious that the admiral did not intend to exploit the situation, indeed that his sole aim was now to bolt back to Japan as quickly as possible.

Nagumo was a traditional battleship admiral who had never pretended to understand air power. He had not relished the Pearl Harbour job, and had remonstrated violently over the hazards inherent in the plan.

Although his dark forebodings had not been realized and his ships had escaped without a scratch, he still wanted to get out. Perhaps he felt his greatest contribution to Japan's over-all war plan would be to bring back his task force intact, since other pressing tasks were awaiting it.

Admiral Tamon Yamaguchi, commanding officer of the Second Carrier Division, *Soryu* and *Hiryu*, informed Nagumo that a third

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wave could be launched from his ships almost immediately. "*Dai niji kogeki jumbi kansei*"—("All is ready for another attack")—he flashed from *Soryu*. Yamaguchi spoke for all the airmen, and Commander Genda never ceased urging Nagumo either to search out and attack the U.S. carriers or to make another strike against U.S. base installations. When Genda's evident dismay verified his own fears that there was to be no further action, Fuchida himself pleaded with Nagumo. To no avail.

At this point only Admiral Isoroku Yamamoto could have turned Nagumo back to Oahu. As Commander-in-Chief of the Combined Fleet and Nagumo's direct superior, he could have ordered another assault to give the U.S. Navy its *coup de grâce*. Yamamoto had conceived and pushed through the audacious Pearl Harbour plan, and from *Nagato*, which was then anchored at Hashirajima in the Inland Sea, he and his staff had followed the raid with almost unbearable suspense.

Exultant radio bulletins from the attacking planes—"Enemy battleships · struck with great damage" . . . "Ford Island in flames" . . . "No air interference" —plus the frantic American messages—"This is the real thing" . . . "All ships clear Pearl Harbour" —told a story of overwhelming success.

Pearl Harbour, however, was but one of Yamamoto's many responsibilities; other fleet operations were already under way in a highly complex plan encompassing most of the Pacific. So he left tactical decisions to the commander at the scene of battle—an officer who happened to be super-cautious.

Part of Admiral Nagumo's caution stemmed from the fact that Japan was fighting a poor man's war. It is much easier to be bold and aggressive if you can afford it. If American ships were lost, the country could readily build others. But every Japanese admiral had constantly to ask himself: Can my vessel be replaced if I lose her? Japan's capacity to build ships was restricted not only by shortages of strategic minerals, machine tools and fuel, but also by inadequacy of technical knowledge and scarcity of trained personnel. Her wheelbarrow economy could ill afford to trade blow for blow with America's industrial colossus—a bitter fact which always had to be considered.

Nagumo felt like a man in a gaming house who had staked his life's savings on the turn of a card —and won. His only thought was to cash in and go home. Like Yamamoto he had a ready supply of Japanese maxims and proverbs "*Yudan taiteki*," he said now. ("Carelessness is the greatest enemy.")

The task force sailed firmly homewards. And Fuchida was so incensed by this excess of prudence

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that he scarcely spoke to Admiral Nagumo during the entire return voyage.

Confusion on Oahu

AT 3 P.M. on that fateful Sunday a telegraph boy cycled up to Admiral Kimmel's headquarters with a message from Washington. It was a cable from General George Marshall to General Short, but a copy had also been dispatched to Admiral Kimmel for his information. The message (which was sent through commercial channels and arrived more than five hours after the raid was over) advised the island defence forces that the Japanese were presenting an ultimatum at 7.30 a.m. Honolulu time. They should be "on the alert accordingly."

Kimmel scanned the cable with baffled rage and hurled it into the waste-paper basket. Its interest was now purely historical.

The incident did not seem out of place in the surrealistic confusion which now reigned on Oahu. No one knew, for example, from what direction the blow had come. Incredibly, not one U.S. pilot succeeded in following the Japanese planes back to their carriers some 200 miles to the north. Early reports seemed to agree that the attackers had come from the south, and all available search planes were sent out to comb that area.

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The Opana radar station near Kahuku Point, where the two men, Lockard and Elliott, had picked up the incoming Japanese planes early that morning, was still manned, and a plot of its findings showed a clear return track to the north. But this carefully collected information was ignored, possibly because radar was then so new that U.S. officers still distrusted it. In any case American eyes remained fixed to the south.

Fantastic rumours swept over the island and were widely believed. One story was that Japanese plantation labourers had cut arrows in the cane fields pointing to Pearl Harbour (a peculiarly illogical rumour since Pearl Harbour is as easy to spot as a bass drum in a telephone box, and would be visible to the attackers long before they could see a marked cane field). Another tale was that cars driven by local Japanese saboteurs had deliberately blocked the road from Honolulu to Pearl Harbour. ("There were no such acts of sabotage in Hawaii," said the local FBI, "before, during or after the attack.")

The Japanese were said to be landing on Diamond Head, on the north shore, at Schofield, in Manoa Valley. (With her other commitments, Japan did not have enough ships to mount such an invasion, or to supply and defend a garrison in

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Hawaii, which is a thousand miles nearer to America than to Japan.) Nevertheless, a Japanese invasion was expected at any moment, and to repel it General Short deployed thousands of men in rifle pits—including air force men who might otherwise have been repairing damaged planes.

With pride smarting and nerves scraped raw, the defenders of Oahu lived through the rest of December 7 as a man might move through a haunted house—half-fearful, half-defiant, jumping at shadows, lashing out savagely at everything which crossed his path.

Pilots sent out to search for the Japanese carriers were shot down when they returned by their own trigger-happy comrades. Even rescue ships still trying to fish men out of the oily waters after nightfall were harassed and endangered by jittery Marines, who constantly challenged them, and blazed away if they were too slow in answering.

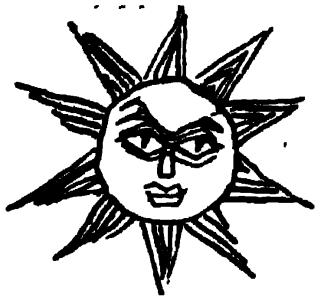
One of the most heartbreaking incidents occurred when an evening flight of fighters from *Enterprise*, returning to the carrier too late to land, were instructed to make for Oahu. The six planes came in with their running lights on and made perfect targets. Over Hickam Field they ran into a blizzard of anti-aircraft fire and, surviving this, were again baptized over the Navy Yard and *Pennsylvania*. Captain James Shoemaker saw three of the planes go down in flames—one hitting the earth at Pearl City on the Peninsula. One pilot parachuted into the water and was rushed to hospital, but died just as he reached it.

Three of the pilots were lucky. One crash-landed on Ford Island in total blackout, climbed out of his plane and walked off unhurt. A second baled out over Barbers Point and survived. And Ensign James Daniels saved his life by a bit of quick thinking. As the guns of Ford Island opened up, he flew straight for the gunners and dazzled them with his landing lights long enough to swoop up out of range. He circled near by until the ack-ack fire tapered off, then came in again, without lights, and landed safely.

Adding Up the Score

"I MUST SAY this air raid was a beautifully planned and beautifully executed military manoeuvre," Admiral Kimmel testified later, with typical bone honesty, at the Roberts Commission investigation. "Leaving aside the unspeakable treachery of it, the Japanese did a fine job."

A survey of the damage showed that they had sunk, capsized or heavily damaged eight battleships, three light cruisers, three destroyers and four auxiliary craft—immobilizing more than 300,000 tons altogether, and dealing the U.S. Navy the most crushing blow in its history. In addition they had wiped out many of the installations at Hickam, Wheeler and other airfields, destroyed 64 of the 231 aircraft



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assigned to the Hawaiian Air Force, and left no more than 79 of the remaining planes immediately usable. And, finally, they had demolished more than half the island's naval aircraft.

How does one account for these terrible losses? Exploiting the advantage of surprise, the Japanese had simply overwhelmed the U.S. forces by throwing 353 planes against them in one fell swoop—an astounding number for that day. But much of the destruction was also the result of the new technique of aerial-torpedo warfare.

U.S. Navy leaders believed aerial torpedoes could not be launched successfully in Pearl Harbour's shallow waters. The Japanese thought otherwise, and proved their point with thoroughness—although they did not solve the problem of a shallow-running torpedo until the last possible moment. The U.S. admirals also doubted whether high-level bombs could penetrate massive deck armour; and here, too, the Japanese surprised them, by devising a peculiarly deadly armour-piercing bomb from the 16-inch shells used by their own battleships.

But the Japanese triumph was far from complete. They met their greatest disappointment in failing to destroy any of the three American carriers. It had been a close thing with *Enterprise*. Returning from Wake Island, she had been saved only by a providential delay when her accompanying destroyers had trouble over refuelling in the heavy seas. Even so she was only 200 miles off Oahu when Fuchida led the first attack wave in.

The Japanese airmen also failed to knock out the machine shops on Oahu—facilities which were to prove invaluable in repairing the stricken ships. And they left intact the oil tanks in which were stored the oceans of fuel necessary to keep the fleet moving. Underground tanks were then being built with desperate haste, but at the moment the oil was still above ground and highly vulnerable. Loss of it might have driven what remained of the U.S. Fleet back to America and in effect yielded command of the Pacific to the Japanese for months.

Luck played its part here when the tanker *Neosho*, berthed next to the tank farm on Ford Island, was almost miraculously spared a hit. An exploding *Neosho* would not only have made an inferno out of the four battleships moored near by —*Maryland, Tennessee, Oklahoma* and *West Virginia*—but would in all probability have also sent the adjacent tank farm up in flames. Good fortune protected her, however, and when Captain Jack Phillips courageously undertook to sail his dangerous craft out of the harbour, the Japanese, intent on bigger game, allowed her to escape.

Finally, the part played by their submarines in the Pearl Harbour attack was such a fiasco that to this

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day Japanese Navy men are at a loss to explain it.

On December 7, 1941, Admiral Kimmel had a total of only nine submarines at Pearl Harbour. Against him the Japanese sent 25 large submarines and five midget two-man submarines. These 30 vessels were hissing through the dark waters of the Pacific days ahead, and were positioned all round Oahu well in advance of the air strike. They were expected to play a major part in the attack—the midgets finishing off already wounded ships at anchor inside the harbour, the regular subs rescuing shot-down Japanese airmen and sinking any U.S. ships which attempted to enter or leave the base.

Apparently the Japanese submariners were neither as well-trained nor as aggressive as the pilots. The returning *Enterprise* and her three escorting cruisers offered tempting targets, as did other U.S. Navy traffic. But Admiral Kimmel's warships were militantly alert, and they thwarted every attempt against them. One large submarine and four of the midgets were sunk, the fifth midget was grounded and had to surrender, and the Japanese undersea fleet accomplished virtually nothing.

Hail the Conquering Heroes!

News of the attack on Pearl Harbour astounded the Japanese people no less than it did the Americans. Excitement was high, and after the

first announcement newsboys raced through the streets continuously, clanging their heralding bells. Every news flash was a fresh excuse to hawk another extra.

"The day for the march of our 100 million compatriots has come," a stirring editorial in *Mainichi* declared. "The day we have been impatiently awaiting has arrived."

The great popular chorus of exultation continued despite solemn warnings by statesmen and military leaders that hard days lay ahead. "Japan Is No Longer a Have-Not Country!" the headlines boasted . . . "History Is Now on the Side of the Axis." . . . "100 Million Are All Heroes." The editor of *Nichi Nichi* undoubtedly reflected the national mood when he exclaimed, "Our watchword today is 'The Imperial forces are invincible.'"

The Navy, long the Cinderella service, shunted aside while the Army basked in public favour, now came into its own. Its airmen were lauded in the most lavish terms for their glorious exploits, and the prestige of the whole Imperial Navy was lifted to dizzying heights.

On December 22, when the First Air Fleet returned from its triumphant 27-day voyage, the occasion was marked by prolonged festivities, flowery congratulatory speeches, ritualistic posing for group photographs, and an endless flow of eager questions.

Even Admiral Osami Nagano, chief of the Naval General Staff, who had originally opposed Yamamoto's madcap scheme, repeated at length for all to hear: *"Yoku Yatta! Yoku Yatta!"* ("Splendid! Splendid!")

Through all the ceremony and celebration the silence of one man was noticeable. Admiral Isoroku Yamamoto, though obviously pleased and in good spirits, stood apart from the exuberant conviviality and mutual back-slapping. His eyes were fixed warily on the future. "Your operation against Pearl Harbour was a great success," he told the victorious sailors. "But you must scrupulously guard against smugness. There are many more battles ahead."

Commander Mitsuo Fuchida, especially, was the hero of the hour. He was interviewed, lionized, regaled with one party after another. Eventually he was accorded the highest honour to which a Shintoist could aspire when the Emperor expressed a desire to have a first-hand report of the fabulous attack. Admiral Nagano then arranged an audience with the "Son of Heaven" and brought Nagumo, Fuchida and Lieutenant-Commander Shigekazu Shimazaki, who had led the second attack wave, with him to Hirohito's palace.

Nagumo's appearance before His Imperial Majesty offered no problem, since he was an admiral. But the low rank of Fuchida and Shimazaki threw the guardians of rigid court etiquette into a dither—

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until they hit on the expedient of making the two pilots, temporarily, "special assistants to the chief of the Naval Staff." The audience, supposed to last 15 minutes, stretched out to 45. And once, replying to one of the Emperor's questions, Fuchida spoke directly to His Majesty—a lapse of protocol which was graciously ignored. (Although Nagumo had sufficient rank to address His Majesty direct, the two younger men were expected to speak through the Imperial *aide*.)

Emperor Hirohito was particularly concerned about injuries to noncombatants. "Were there any hospital ships in Pearl Harbour?" he asked Fuchida. "And did you by chance hit such a ship?" Fuchida told him no such mistake had been made. The Emperor also enquired anxiously if any civilian or unarmed training planes had been shot down. Fuchida reassured him on this point, too.

Fuchida was ill at ease during the entire audience, stumbling over his words and fidgeting nervously with his hands. He was much relieved when the ordeal was over. He confessed afterwards that the attack on Pearl Harbour had been an easier task for him than telling the Emperor about it.

The Japanese have a curious, and to the Western mind sometimes incongruous, passion for the aesthetic and the symbolic. Although the nation was now cast headlong into a long and terrible struggle, this traditional characteristic remained unchanged.

Ushering in the year 1942 in accordance with an age-old custom, the Emperor proclaimed to his people the topic for the annually solicited New Year Welcome Poem. "Clouds Over Mountains" was the chosen subject.

• Commenting on this Imperial choice, the *Japan Times and Advertiser*, which was the official organ of the Foreign Office, remarked lyrically: "Clouds over Mountains are symbolic of a new day beginning. Clouds capping high peaks catch the first grey light of dawn. The first sign of day is thrown on the clouds . . . The whole conception of clouds over mountains is happily illustrative of the year that has just dawned. It is the first day of the year in which Japan is fully to assume the leadership in the construction of a new order over East Asia."

And so as the 17th year of Showa (it translates, ironically enough, into "Enlightened Peace") dawned upon a war-torn Pacific, the rising sun of Japan had never shone more brilliantly nor had it ever cast its fiery rays across a larger horizon. Japan, in truth, rode high above the clouds that day and, from her position at the pinnacle of achievement, all mountains sloped downwards.

Japan's Epic Tragedy

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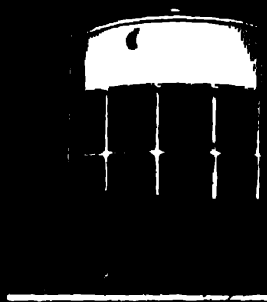
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uneven when it began. But almost from the first it was inexorable.

The tremendous gamble at Pearl Harbour had paid off with the greatest victory the Japanese were fated to win. The long and agonizing war which ensued was fought with all the skill and bravery which was their glory and the senseless brutality which was their bane, but never again would Hirohito's army or navy touch the heights of that first attack. For never again would they have the time to exploit fully their national gift of painstaking craftsmanship, exquisite design and ceaseless patience.

After Pearl Harbour the Japanese Navy raced through the Pacific like a pack of killer whales. But in less than six months the fateful Battle of Midway sent four of Yamamoto's precious carriers gurgling to the bottom: *Akagi, Kaga, Soryu* and *Hiryu*.

This stunning defeat reversed the tide of the Pacific war, and the Saipan campaign, followed by the Battle of Leyte Gulf, eventually reduced the Imperial Navy to "a fish-pond fleet."

By the end of the war the large red building which had housed the Naval General Staff was a mute, lifeless mass of charred ruins. And the bombed-out hulk of the once proud battleship *Nagato*, upon whose broad decks Yamamoto had devised so many plans, tugged hopelessly at her anchor in Yokosuka Bay—a symbol of utter defeat.

Genda survived the war to become in time chief of staff of the new Japanese Air Force, a member of the Japanese parliament and America's good friend. And Fuchida, although he received severe shrapnel wounds in both legs at Midway when *Akagi* went down, lived to become a devout Christian, active as a Presbyterian minister. But most of the participants in the Pearl Harbour strike were destroyed in the holocaust it unleashed.

Lieutenant-Commander Shigeru Itaya, leader of the Zeros in the first wave, met his death in the bleak and fog-bound Kuriles on July 24, 1944, when Japanese army pilots mistook him for an enemy and shot him down. Lieutenant-Commander Kakuichi Takahashi, leader of Fuchida's dive bombers, rode the wind to death and glory on May 8 of the same year. Shimazaki, leader of the second wave, plunged into the sea between the Philippines and Formosa on January 9, 1945. And Lieutenant-Commander Takashige Egusa, the dive-bombing leader who became a living legend in the war, crashed in a ball of smoke and fire over Saipan on June 16, 1944.

Yamaguchi, an ardent supporter of Yamamoto in his bold Hawaiian venture, refused rescue at Midway and chose to go down with *Soryu*. Nagumo, the worrier, who had held so much history in his hands, left his bones on Saipan as proof of his valour. And Yamamoto, Admiral

of the Fleet, met his doom while on an inspection tour of the front on April 18, 1943. U.S. Intelligence had broken the Japanese code and knew where he would be, at what time and how he would travel. His unfailing punctuality finally played him false when a flight of P-38's ambushed him over the steaming jungle of Bougainville.

A Lesson in War

AT PEARL HARBOUR the damage might have been far worse than it was. Unaccountably, the Japanese had failed to destroy the naval yard with its vital machine shops—the "navy behind the navy"—and the tank farms which stored the precious lifeblood of the fleet. And, all things considered, Admiral Kimmel's decision to leave his ships in port over the week-end had been a wise one. If Nagumo's raiders had sunk the ships at sea, they would have been permanently lost. As it was, many of them were raised to fight another day.

Genda never ceased to lament the fact that Nagumo had not allowed his airmen to follow through for the final kill. "Had we knocked Pearl Harbour out and destroyed either *Enterprise* or *Lexington*, or both, the war in the Pacific would have been vastly different," he said in retrospect. "We should not have attacked just once. We should have attacked again and again."

Many U.S. Navy men agree with him, including Admiral Nimitz, who succeeded Kimmel in the Hawaiian command. "Future students of our naval war in the Pacific," he wrote, "will inevitably conclude that the Japanese commander of the carrier task force missed a golden opportunity in restricting his attack on Pearl Harbour to one day's operations, and in the very limited choice of objectives."

Apart from the tragic loss of life, Pearl Harbour was by no means an unmitigated disaster. A number of U.S. Navy commanders who were in Hawaii believe that the Japanese "did us a favour" by sinking a lot of "obsolete scrap iron" and by making the carrier "the heart of the new sea power." The Japanese also threw away the ripe fruits of an advantageous neutrality by plunging into a shooting war with the United States. And in one stroke, by making Hawaii the first target of their shocking attack, they unified a badly divided and isolation-bent America. "President Roosevelt should have pinned medals on us," wryly admitted Admiral Chuichi Hara, commander of the Japanese Fifth Carrier Division, *Shokaku* and *Zuikaku*.

For people who live in the new age of serious international tensions and unimaginable nuclear power, Pearl Harbour remains an imperative lesson in war. It also underscores one of history's bitter truths: the unexpected can happen and often does. THE END



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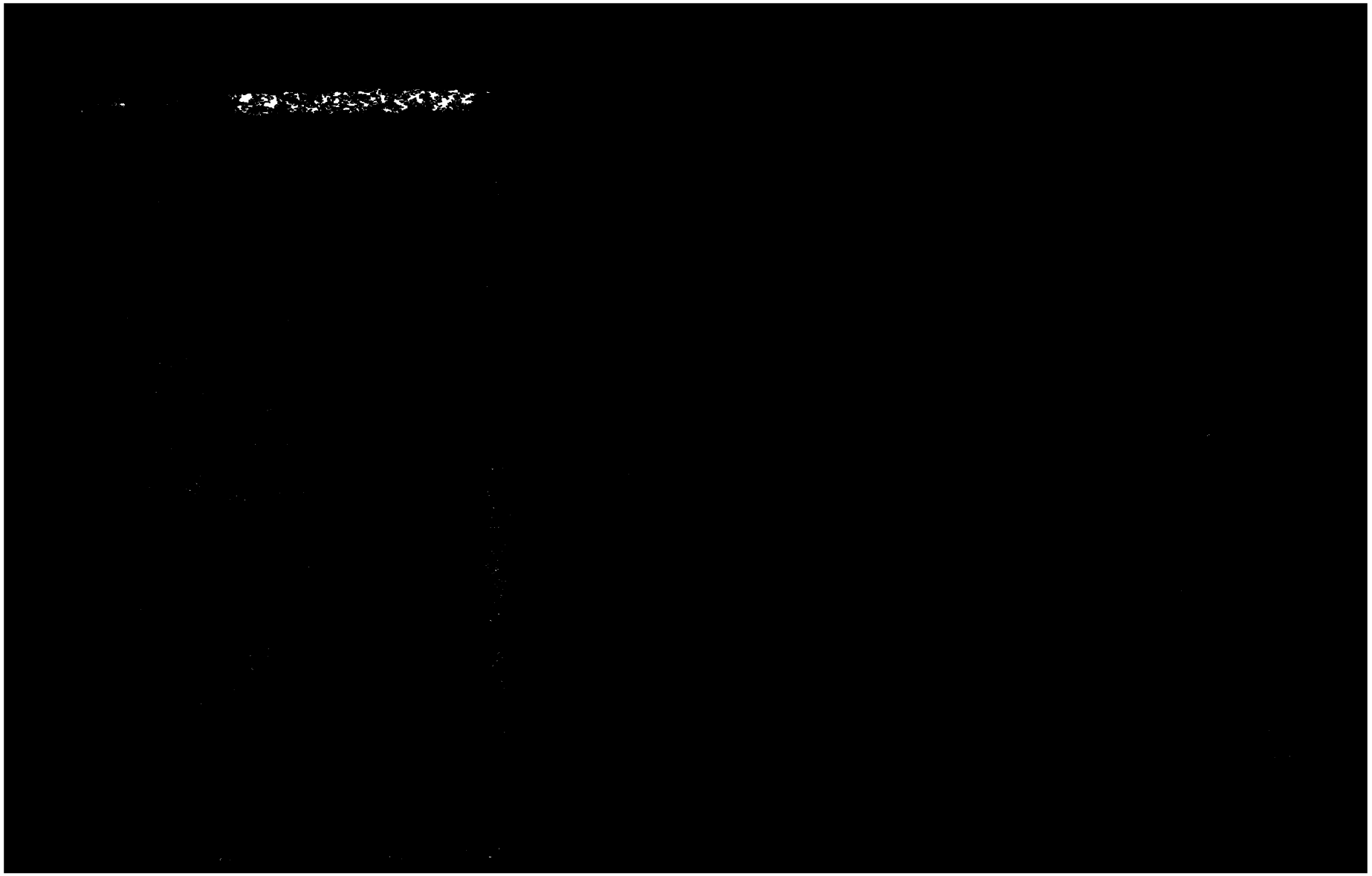
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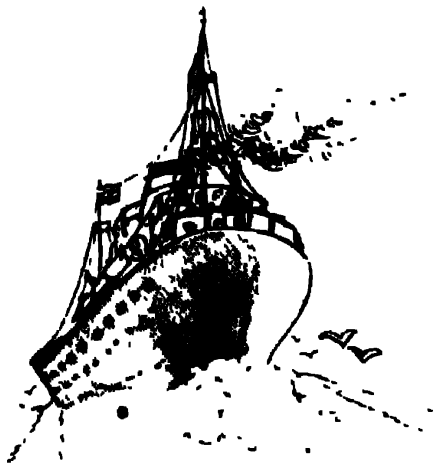
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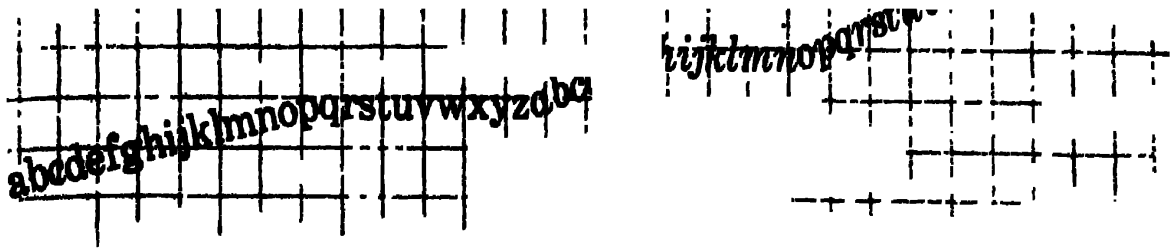
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It Pays to Increase Your Word Power

By Wilfred Funk

In this miscellany of nouns, verbs and adjectives, tick the word or phrase you believe to be *nearest in meaning* to the key word. Answers are on page 12.

(1) **abate** (a bāte′)—A: to reduce. B: increase. C: suppress. D: tease.

(2) **visage** (viz′ ij)—A: endorsement. B: landscape. C: face. D: dream.

(3) **conjugal** (kon′ joŏ gal)—A: friendly. B: joined. C: probable or supposed. D: concerning marriage.

(4) **inconsequential**—A: illogical. B: important. C: not following naturally. D: secret.

(5) **leonine** (lē′ o nīne)—A: lion-like. B: silky. C: flowing. D: graceful.

(6) **lax**—A: irritated. B: slack. C: tardy. D: peaceful.

(7) **plaudit**—A: enthusiastic approval. B: apparent truth. C: loud noise. D: criticism.

(8) **infest**- A: to cause disease by introducing germs. B: enrage. C: be present in annoying numbers. D: ulcerate.

(9) **mirage** (mĭ rahzh′)—A: miracle. B: amazement. C: confusion. D: optical illusion.

(10) **abstemious** (ab stē mĭ us)—A: avoiding excess. B: shy. C: fussy. D: emaciated.

(11) **attain**—A: to cling to. B: achieve or gain. C: climb. D: possess.

(12) **adjacent** (a jā′ sent)—A: beneath. B: above. C: attached to. D: near or next to.

(13) **valorous** (val′ or us)—A: brave. B: righteous. C: vain. D: boastful.

(14) **dispatch**—A: dismissal. B: desperation. C: speedy execution. D: abruptness.

(15) **facility**—A: aid. B: ease and readiness. C: grace. D: rhythm.

(16) **irrespective**—A: uncertain. B: without honour. C: irresolute. D: regardless.

(17) **extant** (eks′ tant or eks tant′)—A: long-drawn-out. B: still existing. C: far-reaching. D: prominent.

(18) **fettle**—A: shackle. B: joint of a horse's leg. C: condition or shape. D: excellence.

(19) **forgo**—A: to move ahead. B: prevent. C: forget. D: do without.

(20) **habitable**—A: customary. B: capable of being lived in. C: endurable. D: well-mannered.

(*Now turn to page 12*)

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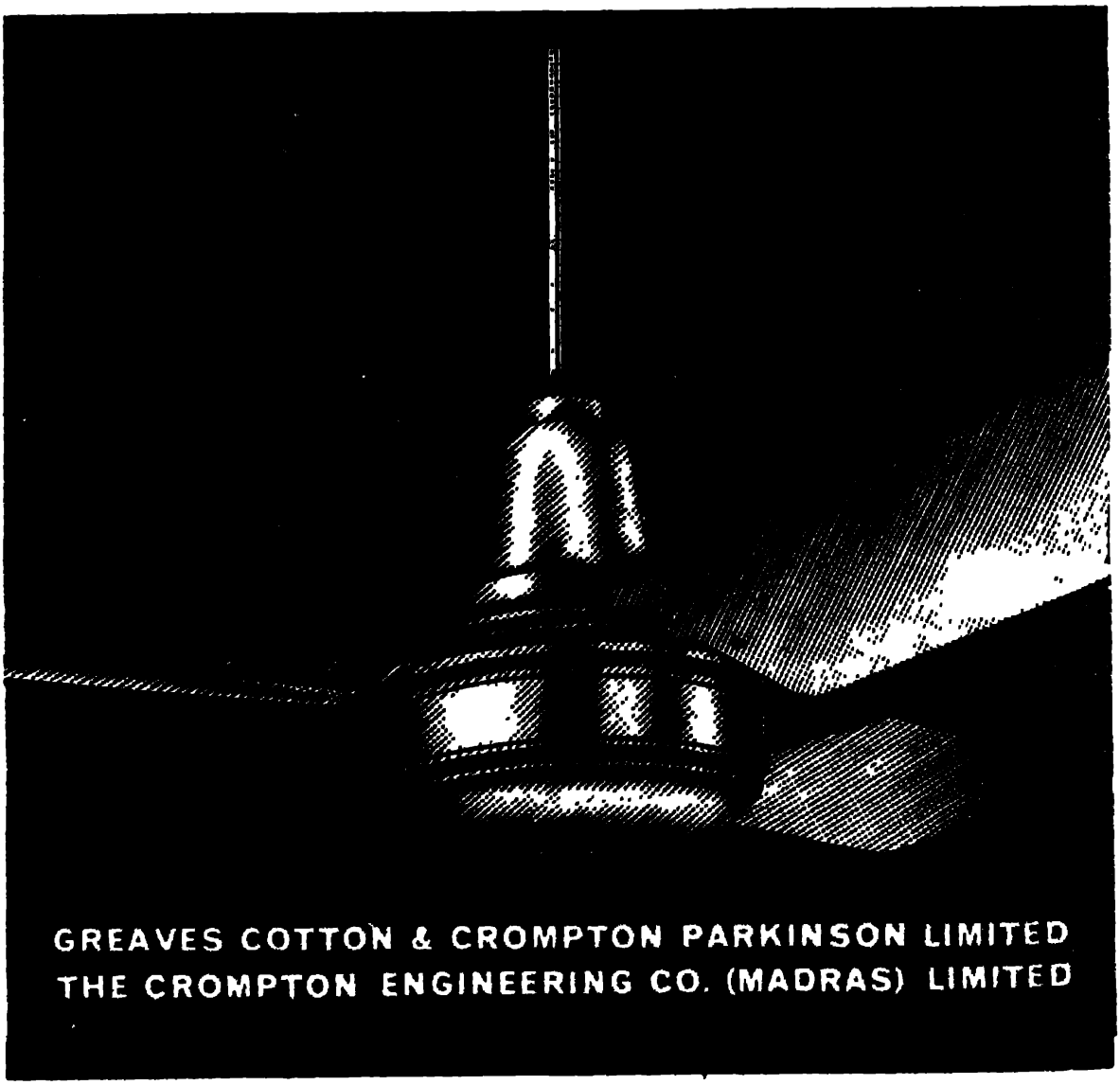


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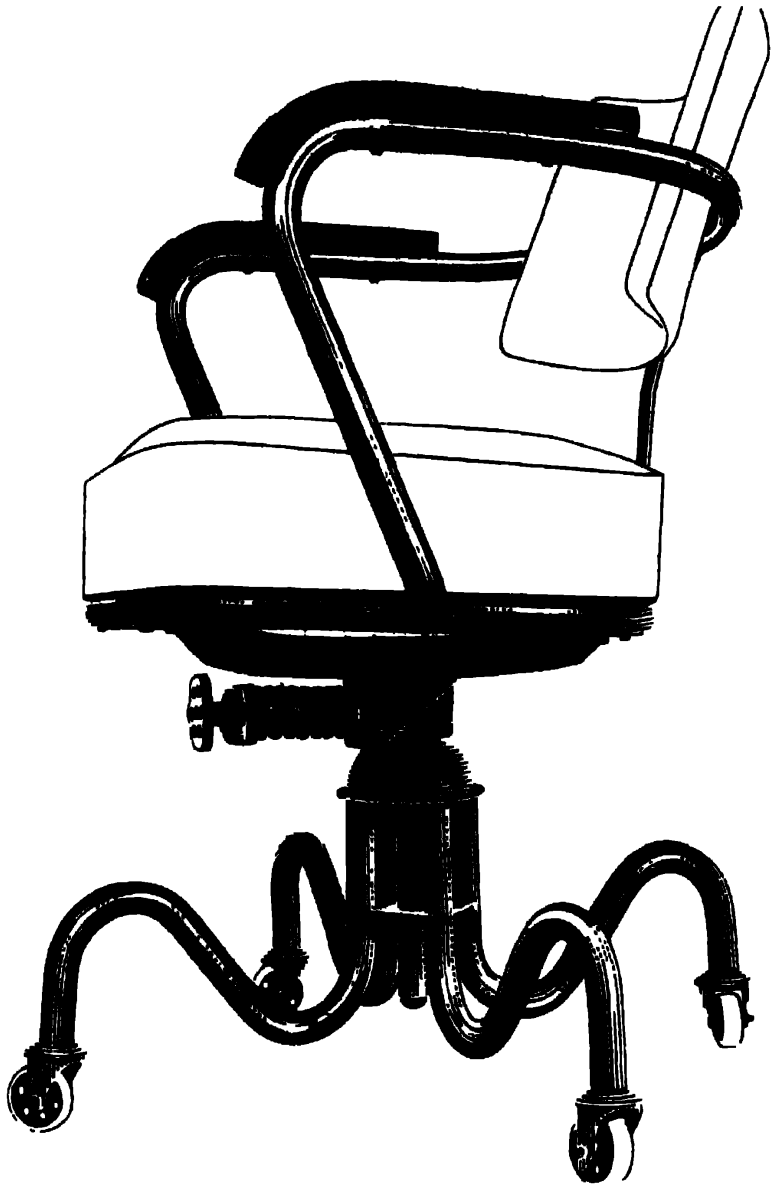
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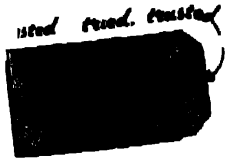
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Answers to the quiz on page 7

(1) **abate**—A: To reduce; lower; diminish; as, to *abate* a tax; (intransitive) "The storm *abated*." Old French *abatre*, "to beat down."

(2) **visage**—C: Face, countenance or expression of a person or animal; as, a genial *visage*. Latin *visus*, "look."

(3) **conjugal**—D: Concerning marriage; as, a life of *conjugal* bliss. Latin *conjugalis* from *conjungere*, "to join together."

(4) **inconsequential**—C: Not following naturally, irrelevant; wanting in logical sequence; as, *inconsequential* remark. Latin *in-*, "not," and *consequi*, "to follow along."

(5) **leonine**—A: Lion-like; as, a *leonine* head. Latin *leo*, "lion."

(6) **lax**—B: Slack; not rigid, strict or stringent; as, *lax* morals. Latin *laxus*, "loose."

(7) **plaudit**—A: Enthusiastic approval; applause, as, to acknowledge the *plaudits* of the crowd. Latin *plaudere*, "to applaud."

(8) **infest**—C: To be present in annoying numbers; beset; overrun; as, "Vermin *infest* the slums." Latin *infestare*, from *infestus*, "hostile."

(9) **mirage**—D: Optical illusion: atmospheric reflection of a distant object, as, to be misled by a *mirage*. Latin *mirari*, "to wonder at."

(10) **abstemious**—A: Avoiding excess; marked by restraint in eating and drinking; abstinent; as, Gandhi's *abstemious* habits. Latin *abstemius*.

(11) **attain**—B. To achieve or gain; as, to *attain* great wealth. Latin *attingere*, "to reach."

(12) **adjacent**—D: Near or next to; adjoining; as, *adjacent* homes. Latin *adjacere*, "to lie near."

(13) **valorous**—A: Brave; courageous. Latin *valere*, "to be strong."

(14) **dispatch**—C: Speedy execution; prompt disposal; hence, speed, haste; as, to act with *dispatch*. Spanish *despachar*, "to get rid of."

(15) **facility**—B: Ease and readiness; as, to handle a job with *facility*. Latin *facilitas*, from *facilis*, "easy."

(16) **irrespective**—D: Regardless; lacking relation; independent; as, *irrespective* of political differences. Latin *in-*, "not," and *respectus*, from *respicere*, "to look back."

(17) **extant**—B: Still existing and known; not destroyed; as, one of the few books *extant* on the subject. Latin *exstare*, "to stand out."

(18) **fettle**—C: Condition or shape; as, to be in fine *fettle*. Middle English *fetlen*, "to gird up, prepare."

(19) **forgo**—D: To do without; abstain from; deny oneself; as, to *forgo* worldly pleasures. Old English *forgān*, "to pass

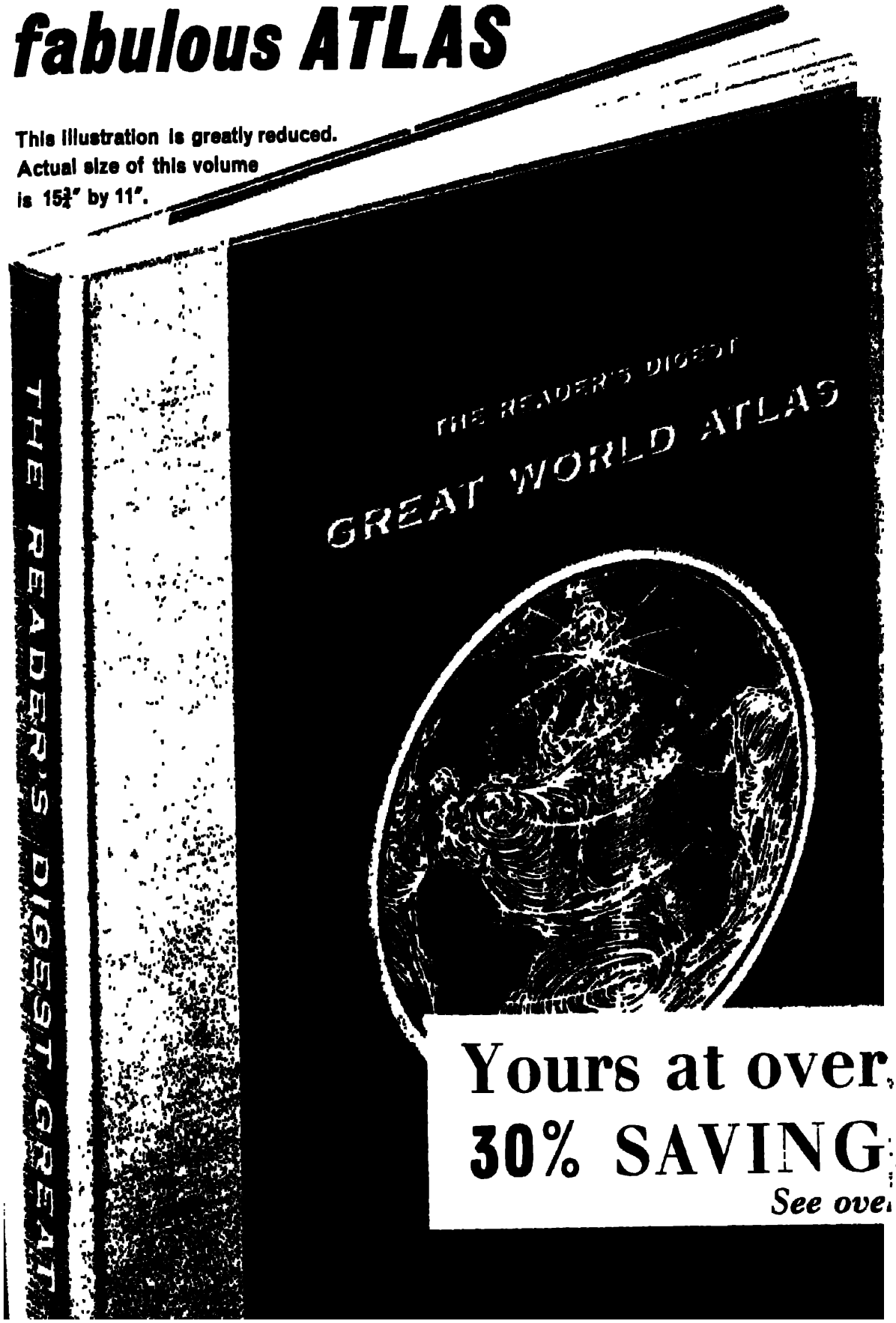
(20) **habitable**—B: Capable of being lived in; as, a *habitable* dwelling. Latin *habitabilis*.

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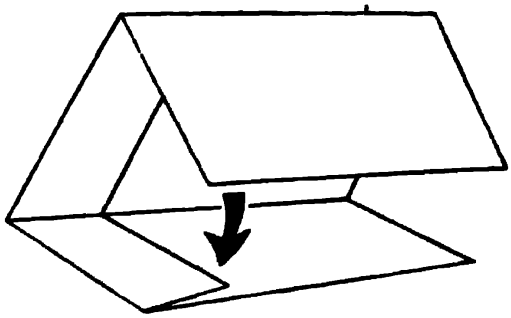
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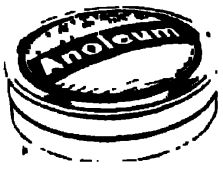
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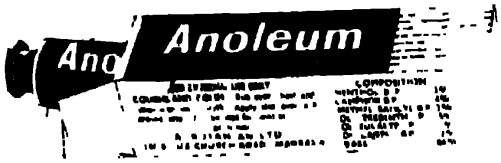


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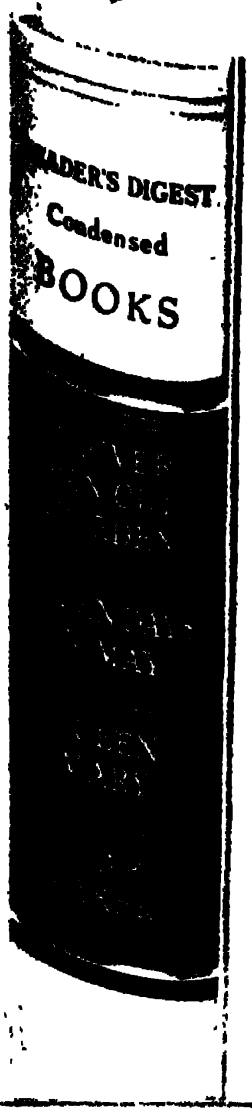
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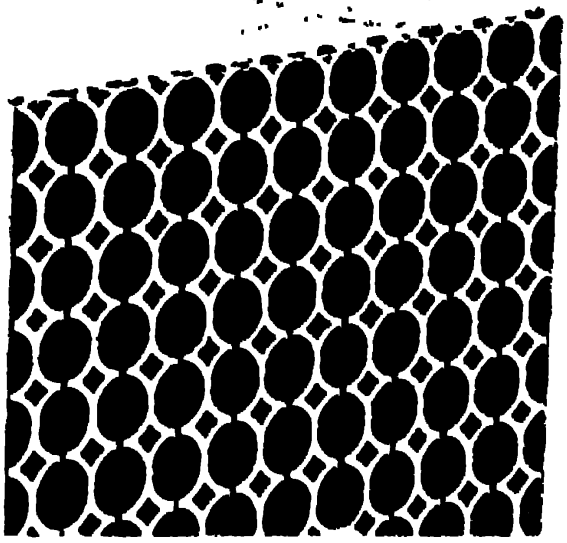












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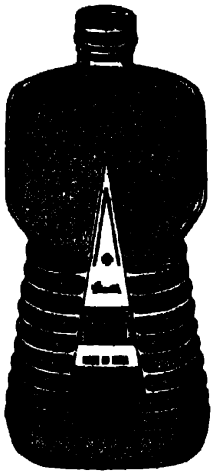
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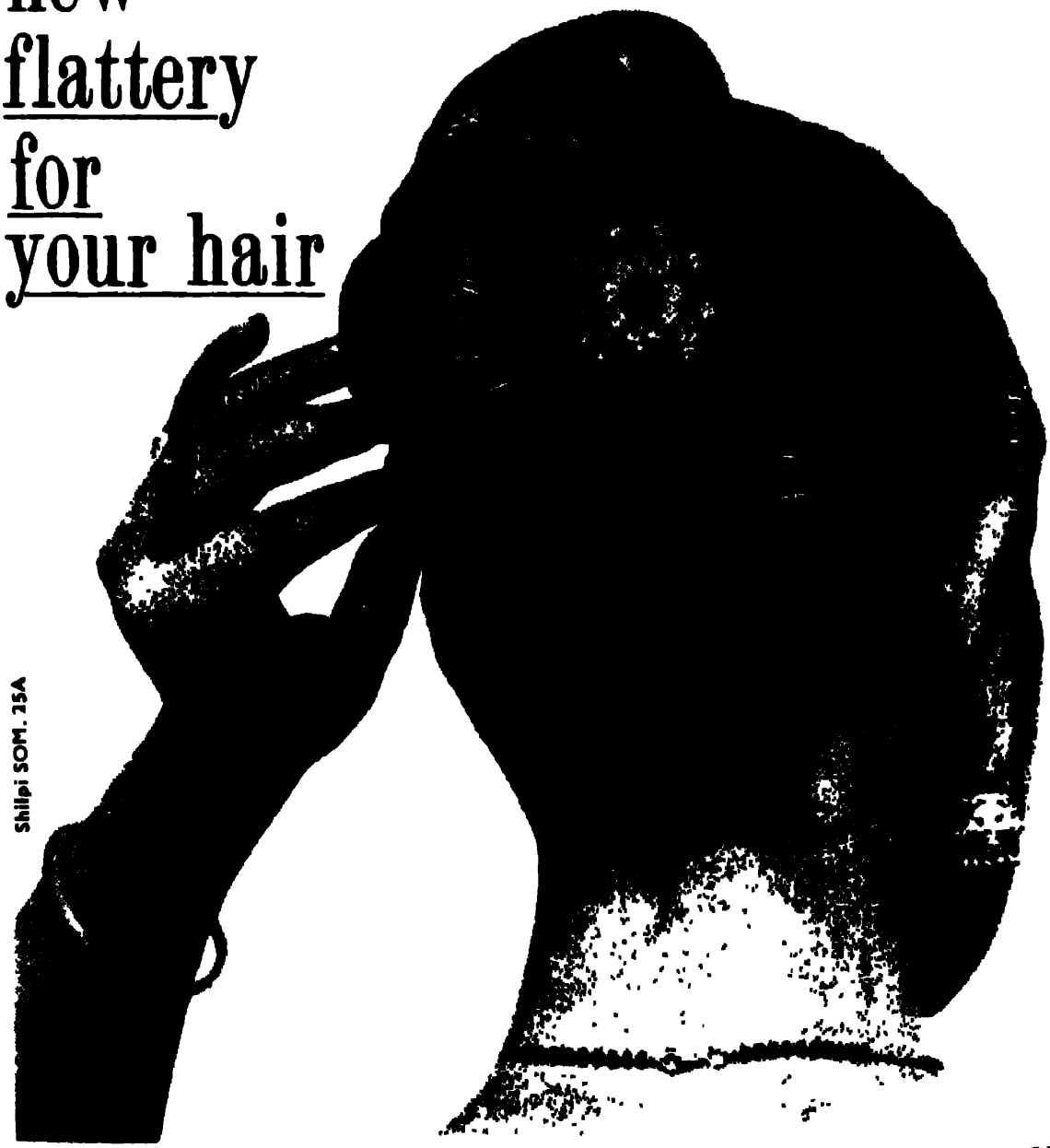
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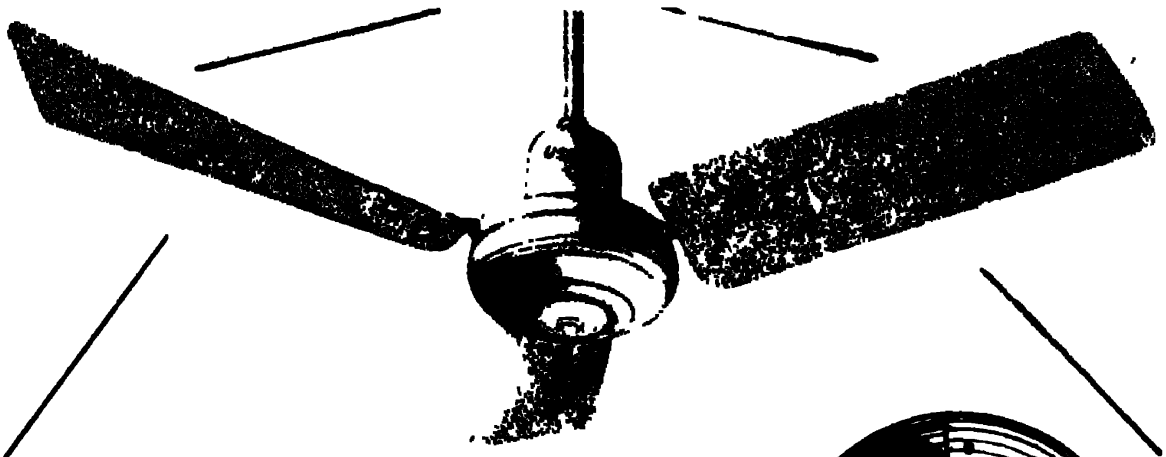
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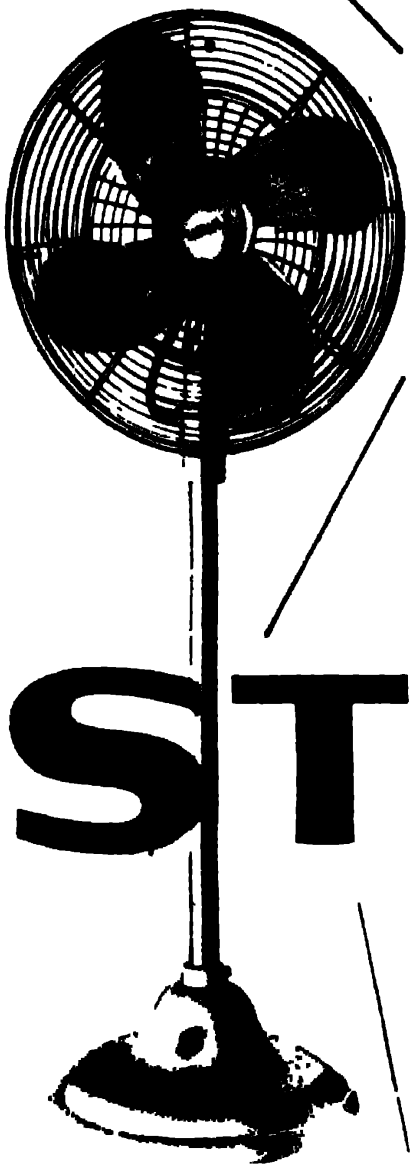
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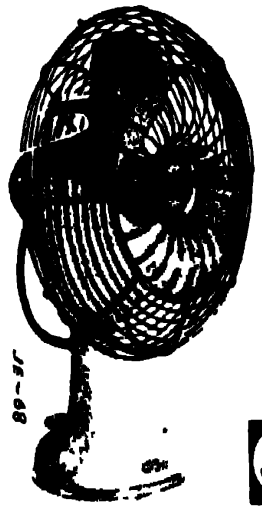
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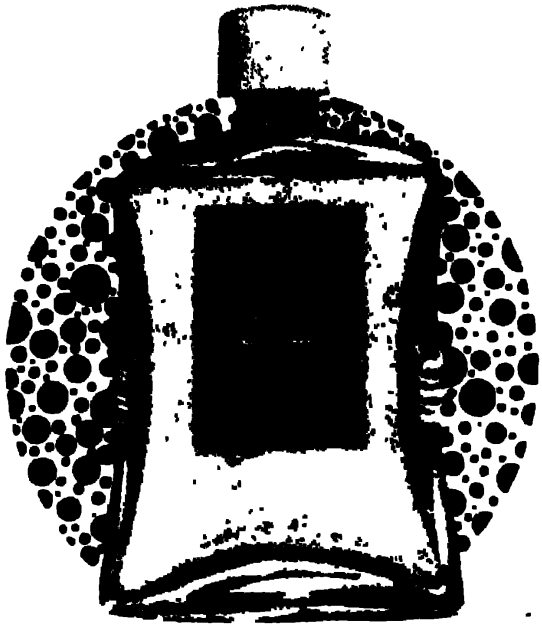
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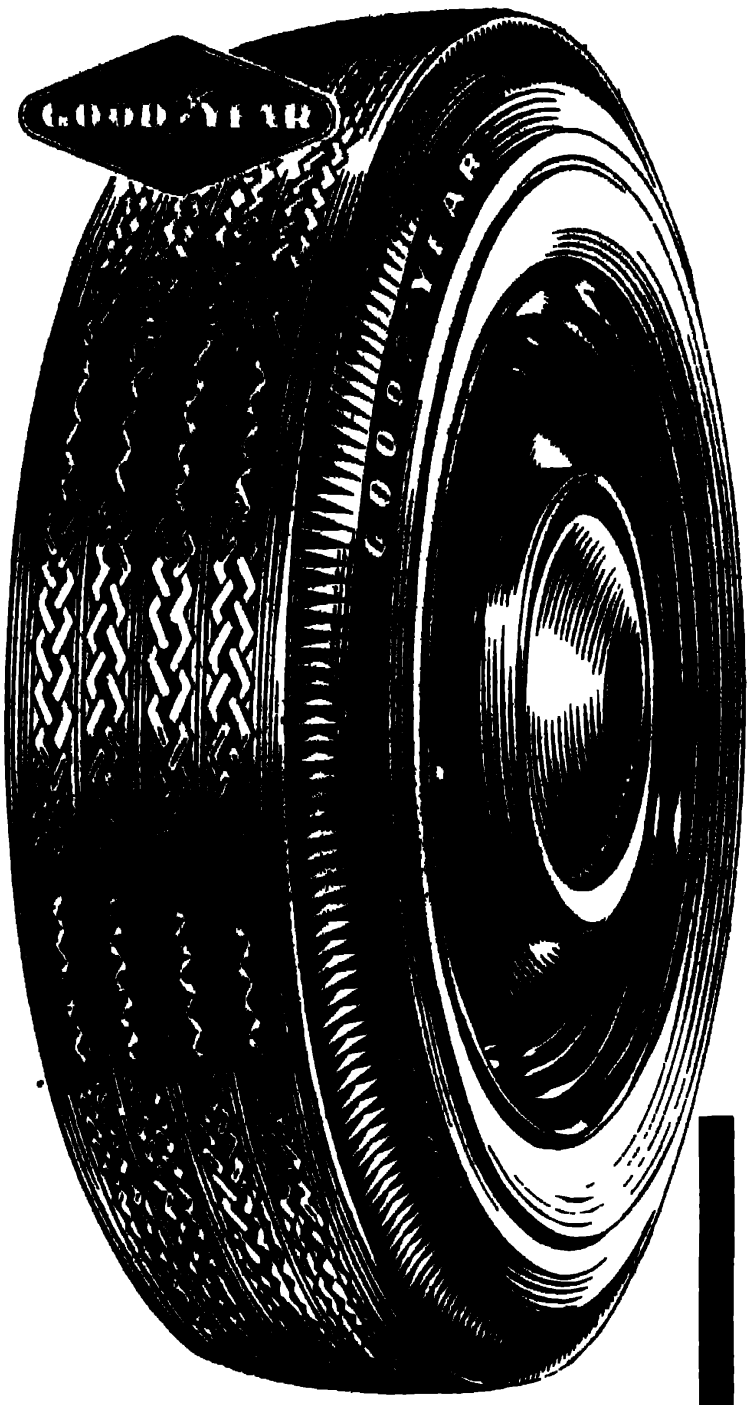
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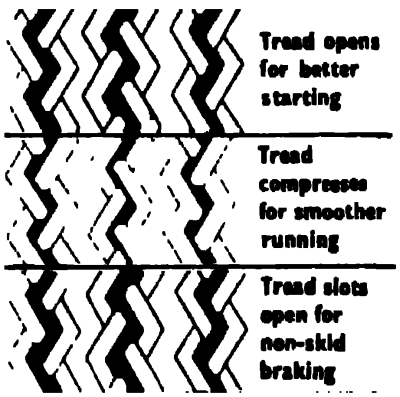
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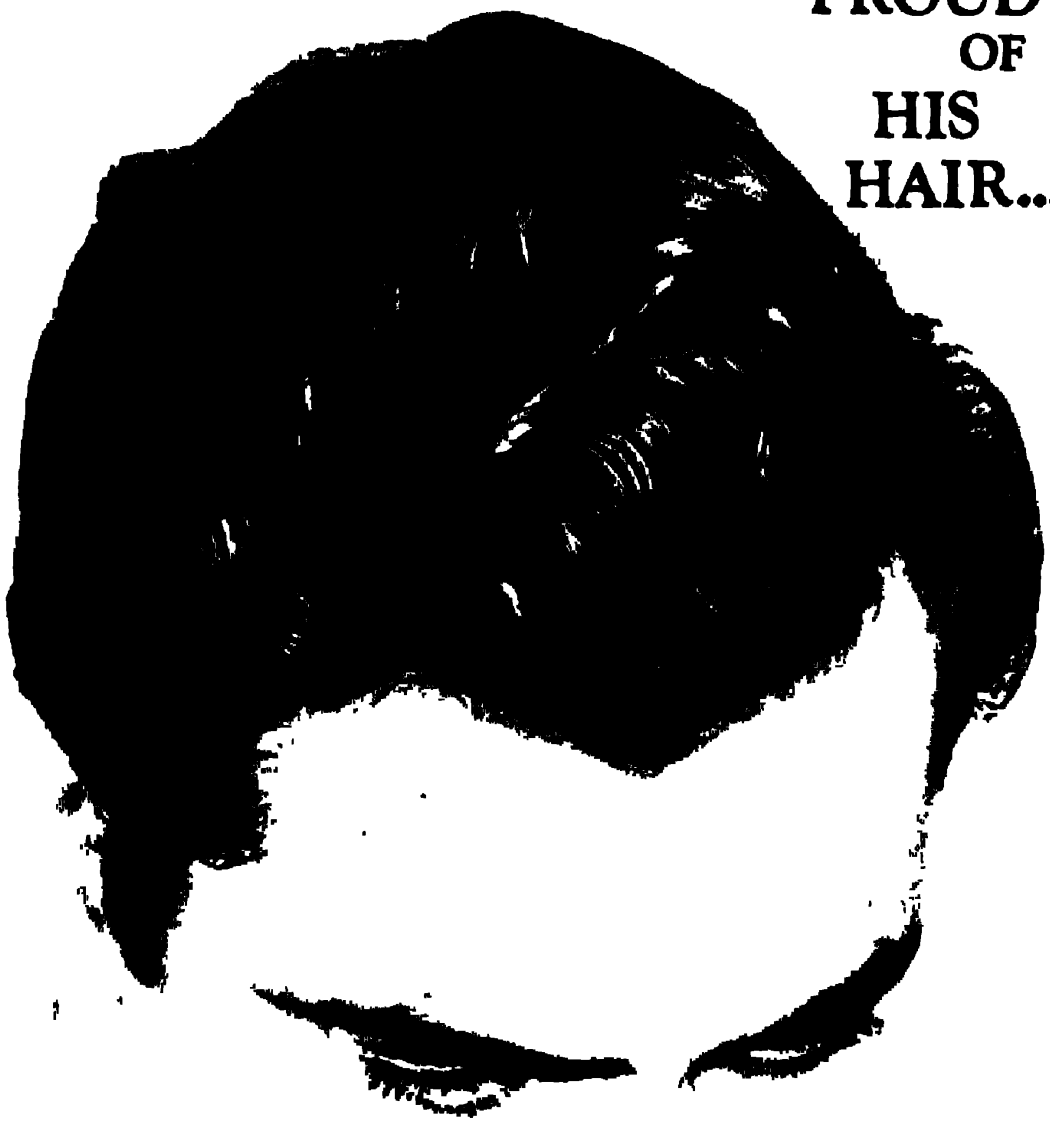
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Know Yourself!

A recipe for the rediscovery of the zest for life

By John Gardner

"It's not only the most difficult thing to know oneself, but the most inconvenient," a philosopher once said. Human beings have always employed an enormous variety of clever devices for running away from themselves. Today we can keep ourselves so busy, fill our lives with so many diversions, stuff our heads with so much knowledge and involve ourselves with so many people that we never have time to probe the fearful and wonderful world within. More often than not we don't even want to.

Yet the ancient maxim "Know thyself"—so deceptively simple—gains richer meaning as we learn more about man's nature. Research in psychology and psychiatry reveals how closely mental health is bound up in a reasonably objective view of the self, in accessibility of the self to consciousness, and in acceptance of the self.

Men and women who have become strangers to themselves can no longer return for sustenance to the springs of their own being: they have lost the capacity for self-renewal. Sometimes it happens that one of the major changes of life—marriage, a move to a new town, a change of job—breaks the pattern of our lives and quite suddenly reveals to us how much we have been imprisoned by the comfortable web we had woven around ourselves. It was a characteristic experience during the war that men and women, forced to break the pattern of their lives, discovered within themselves resources and abilities they had not known existed. How ironic that it should take war and disaster to bring about self-renewal!

Now, self-renewal is not measured by volume of new experiences, number of new interests, nor by any other index of sheer activity. Let's not make that mistake. People are already too inclined to quieten their anxieties with busy work. In everybody's normal environment there is enough depth and variety of human experience, enough complexity of human interaction to place endlessly new demands on the mind and spirit. There is enough, *provided* you have the gift for constantly searching your individual universe with an undimmed eye and an unhackneyed mind.

Why are some individuals capable of self-renewal while others are not? No one knows. But we have important clues to what we might do to foster that experience.

Keep your horizons wide. Self-renewing individuals are versatile and adaptive. They avoid being trapped in the procedures and routines of the moment, or being wholly imprisoned by fixed habits and attitudes. As the years go by, most of us progressively narrow the scope and variety of our lives. Of all the interests we might pursue, we settle on a few. Of all the people with whom we might associate, we select a small number. Our opinions harden. Our ideas congeal. This may be an inevitable part of living, but it is also a kind of imprisonment.

The selective narrowing of habits and attitudes extends to every area of life. We view our familiar surroundings with less and less attentiveness. That is why travel can be such a vivid experience. It shakes us out of our apathy, renews our freshness of perception, and we recapture in some measure the unspoilt awareness of children and artists.

Much education today is monumentally ineffective in teaching the art of self-renewal All too often we give our young people cut flowers when we should teach them to grow their own plants. We stuff their heads with the products of earlier innovation rather than teach them to innovate.

Develop your potentialities. Most human beings go through life only partially aware of the full range of their abilities.

The development of abilities is at least in part a dialogue between the individual and his environment. Thus, any small boy with real ability to wield his fists is likely to discover it fairly early. The little girl with the gift for charming grown-ups will have no trouble discovering that talent. But most abilities are not so readily evoked, and most of us have potentialities that never developed, simply because the circumstances of our lives never called them forth. Yet exploration of one's potentialities need not be left to the chances of life. One can pursue it systematically, or at least avidly, to the end of one's days.

Risk failure. Learning is a risky business. In infancy, when the child

is learning at a truly phenomenal rate, he is also experiencing a shattering number of failures. Watch him. See the innumerable things he tries and see how little the failures discourage him. With each year that passes he will be less blithe about failure. By middle age we carry in our heads a tremendous catalogue of things we have no intention of trying again because we tried them once and failed. Also, we tend increasingly to avoid things we have never tried.

Such fear of failure prevents exploration and experimentation, and assures the progressive narrowing of personality. To keep on learning and growing, you must keep on risking failure—all your life.

Follow your beliefs. The walls that hem us in as we grow older are really channel walls. To get out of those channels of least resistance requires some extra drive, enthusiasm or energy. Is it possible to do anything about one's own energy and motivation? The answer is, *perhaps*.

Everyone has noted the astonishing sources of energy that seem available to those who enjoy or find meaning in what they are doing. Obviously, all of us cannot spend all our time pursuing our deepest convictions But all of us, either in our career, or home life, or part-time activities, should be doing something about which we care deeply —one little thing that we can do with burning conviction. And if we are to escape the prison of the self, it must be something not essentially egocentric in nature.

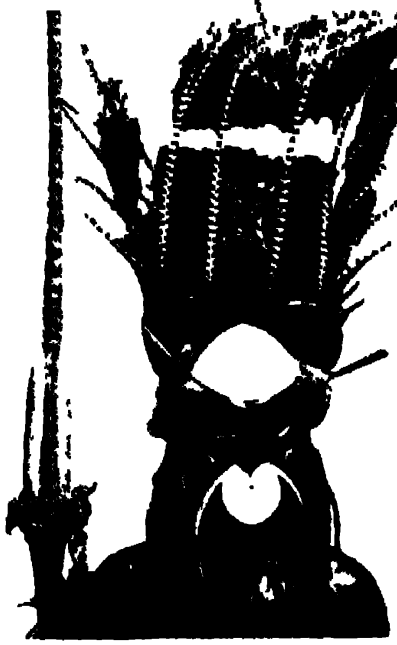
If you want to get back to the source of your own vitality, to be refreshed and renewed, cut through the false fronts of life and try to understand which are the things that you really believe in and can put your heart into.

It is worth recalling the mythical giant, Antaeus, who was invincible in wrestling as long as he remained in contact with the earth. Modern man, in our intricately organized, over-verbalized civilization, spins a web of verbal and numerical abstractions that finally imprisons him. It is wisdom to cut through such abstractions and artificialities in periodic return to the solid earth of direct experience—direct contact with nature, face-to-face relations with one's fellow man, fashioning something with one's own hands.

Love and friendship. It is characteristic of self-renewing people that they have mutually fruitful relations with other human beings. They are capable of accepting love and capable of giving it—both more difficult achievements than is commonly thought. The joys and sufferings of those we love are part of our own experience. Our lives are richer for it. But there is a larger consequence. Love and friendship dissolve the rigidities of the isolated self, force new perspectives. They keep in working order the emotional substratum on which all comprehension of human affairs must rest.

Condensed from an address by the author, who is President of the Carnegie Corporation of New York and the Carnegie Foundation for the Advancement of Teaching

NEW GUINEA



The Land that Time Forgot

By Lowell Thomas

NOWHERE, surely, is there another land like this. Shaped like a dinosaur, New Guinea drags its 316,000-square-mile bulk across the top of Australia, its head to the west bumping the underside of the Equator, its mountain-spined tail dipping into the Coral Sea. The largest island on earth (except for Greenland), this is a land wild, exotic and unbelievably primitive, the least-explored part of the inhabited world.

New Guinea's throbbing interior is compounded of green mystery and turbulent beauty, of impenetrable rain forests and great gorges, of lush valleys and rushing rivers. Through its mighty forests swoop a hundred varieties of rare birds with rainbow plumage, including that most gorgeous of all, the bird of paradise. In its vast jungles are kangaroos that climb trees, bats with a wingspan of five feet, giant lizards and snakes. In its miasmal swamps and rivers swarm crocodiles, and turtles that weigh hundreds of pounds.

This remote land mass is the last stronghold of Stone Age man. Flying along the 1,000-mile-long spine of central New Guinea's jagged mountain ranges you look down into valleys where dwell people who live as they lived 10,000 years ago

PHOTOGRAPHS: OTTO LANG



In a hidden valley, Kopiago tribesmen gather for a typical "sing-sing"

—hundreds of thousands of them—who do not know of the white man's existence, who indeed have never suspected that there is any world beyond their valley's rim. In many parts of Australian-controlled New Guinea an unwary stranger still runs the risk of being speared by a head-hunter, brained by a stone axe, or ending up as a menu item for cannibals with a fondness for "long pig."

Six years ago I went 400 miles up the steamy, crocodile-infested Sepik and May rivers to photograph the life and ways of certain head-hunting tribes. I knew I would go back one day, and last summer I did.

With a camera crew I went deep into the interior of this incredible island. Our objective was to witness a spectacular event—75,000 Stone Age people gathered in the mile-high, 100-mile-long Wahgi Valley for a roistering "big fella sing-sing" and a display of tribal customs as old as time. The gigantic festival—an agricultural show sponsored by the Australian district administration—was centred at Mount Hagen, in the recently opened Western Highlands.

Before dawn of opening day we were awakened by a wild chanting and drum-beating as thousands of tribesmen poured on to the huge



A "young fella mary," bedecked with plumes, thus indicates her father's wealth and also announces her availability for marriage



New Guinea tribesmen are the most gaudily decorated men on earth. These sport on their heads the plumage of the bird of paradise

field set aside for the gathering. Singing, shouting, stamping, they flowed across the field in a surging flood of humanity—their faces fierce with tribal markings, with bones and boars' tusks thrust through their noses, their bodies glistening with pig grease. All were virtually naked, but their head-dresses were the gorgeous plumage from hundreds of birds.

As this wildly bizarre pageant moved round and round the field, the mountain air ringing with primitive chants, the earth actually shaking with the dancers' rhythms, it came to me that few modern men have ever witnessed a more barbaric scene. Even the spectators were out of this world. One of them had been dead for six months. Smoked by his fellow Lagaip tribesmen, he had been brought here because he had expressed a wish to attend and his tribe could not disappoint him.

Added to the colour was a real possibility of trouble. Here were gathered tribes which had been warring for centuries. All bore spears, bows and arrows, stone axes; all were keyed up with excitement. But curiosity overcame belligerence. Many were seeing other tribes close-up for the first time. Between dancing and sing-songs they milled about, ogling one another or gazing entranced at the exhibits,

LOWELL THOMAS enjoys unique renown as a world traveller, broadcaster and adventurer, a seasoned observer and reporter of history in the making.

PHOTOGRAPHS (LEFT) LYNTON DIGGLE, (RIGHT) ALASTAIR CAWTHORNE



At the spectacular Mount Hagen agricultural show, natives demonstrate for visitors and rival tribesmen their prowess with the bow and arrow



A Wahgi highlander. Tribesmen, who range in size from tiny pygmies to giants between six and seven feet tall, are mainly Melanesian in origin

which included superior farm produce, livestock, schoolwork and handicrafts that had been taught to more advanced tribesmen by the white man. For any Stone Ager, there was much to marvel at; much to set him thinking about things he, too, might have or might become.

This in fact was the purpose of the show. "What we want to do," said District Commissioner Tom Ellis, "is to break down their insularity, let them see how co-operation with the government can expand their lives, bring them law and order, health—above all, peace."

Besides these 75,000, how many Stone Agers are there in this land that time forgot? Nobody knows for sure. New pockets of humanity are constantly being discovered. But in Australian New Guinea alone (the eastern half of the island, consisting of Australian-owned Papua and the Australian-administered Trust Territory) there are at least two million. Of native languages and dialects there are hundreds, though easy-to-learn pidgin English provides a basis for communication among the more literate tribes.*

Strange and barbaric customs persist, only the more lethal of which the government tries to put down, having no wish, as Native Affairs Director Keith McCarthy puts it "to make sun-browned Europeans of these people. They must preserve their own identity and as much of their culture as will help them."

* See "The 'Can Do' Language," The Reader's Digest, November 1963.

ANTON DIGGLE

Government patrol officers try to root out cannibalism in areas which they have brought under control. (Anthropologists claim that eating "man meat" comes mostly from protein deficiency; edible wild-animal life is scarce in New Guinea.) Yet there is evidence aplenty that ritual cannibalism is still practised among some tribes, as among the dread Kukukukus, who eat the arm and leg muscles of slain enemies to gain the dead men's strength. Only a few years ago two Australian patrol officers at Telefomin were speared to death, one hacked to pieces and eaten.

The fiction of the "happy savage," content in all his ways, is pretty but untrue. From the hour he is born, the average New Guinea tribesman lives with fear and death —from his enemies, from a variety of diseases, from sorcery in a hundred forms. The spirits of his ancestors, all about him, have to be appeased in case they bring sickness and death.

To keep ancestral spirits in a good mood, some tribes build large and elaborate *tamberans* or "spirit houses" like one I saw beside the Sepik River in 1957. It was 200 feet long and as high as a four-storey building, resting on massive posts with the floor six feet above ground. Its inside columns were carved with birds and grotesque figures, and high overhead hung weird masks and human skulls.

The tradition has always been that when a *tamberan's* first post-hole is dug a human being must be put in alive and then the great pole dropped on to him.

Some tribes hang the skulls of their ancestors in net bags on the walls of their houses. In at least one tribe, the Azera, a widow eschews all adornment save the skull of her deceased husband, which is hung from her neck. Others use the skulls of dear ones for pillows.

Boys are taught to bear pain stoically. Girls have things easier—at first. Until marriage, usually in her early teens, a "young fella mary" lives a gay and uninhibited life, paints her face, adorns herself with shells and feathers, and awaits the best bid for marriage. Once married, however, she becomes a drudge, tending gardens, carrying firewood, cooking, making nets and baskets. Polygamy is common; it is not objected to by a wife, for the more wives sharing a husband the less work there is for each.

Marriage is an important economic event. The value of gifts given for a "young fella mary" in good health may be as high as Rs. 2,000 in pigs, shells, axes and spears. Sometimes a bride is stolen or captured from a rival tribe. "Mary stealing," along with pig stealing, is the cause of most tribal vendettas.

Ever since 1527, when the Spaniard Don Jorge de Meneses landed on New Guinea's hostile beaches, explorers, traders and adventurers have come and gone. But few ever

dared go more than a few miles inland. Only in the last 30 years has there been any serious effort to find out what lay behind the island's wild jumble of mountains.

It was the magic cry of "Gold!" that lifted the first veil. Rumours that the alluring metal lay beyond the ranges began after the First World War, and adventurers to go in to rescue and control them, and to the missionaries who inevitably followed, belongs the credit for opening up the glorious New Guinea highlands.

Many of these pioneers can still be found around the bars of Port Moresby, Lae, Madang, Goroka and Mount Hagen, or settled on comfortable ranches. We met, for



trekked in. Few ever came out. One who did was a colourful character named "Sharkeye" Park, an Australian miner. Sharkeye plunged into the heavily jungled Kuper Range and after surviving Kukukuku attacks, found his rainbow's end—the fabulously rich gold strike at Koranga Creek, near Bulolo.

The discovery started a stampede. To those gold-fevered men, to the government patrol officers who had example, the incredible Leahy brothers, who bear on their bodies the scars of innumerable near-fatal spearings. Among the first at Edie Creek, they fought off Kukukukus with one hand while panning gold with the other. Then, fighting their way hundreds of miles deeper into the highlands, they became in 1933 the first white men to set eyes on the great undreamed-of Wahgi Valley. Here, from Ewunga Creek.

Michael and Dan Leahy eventually took out Rs. 9 lakhs' worth of placer gold.

Michael Leahy, now 60, lives at Zenag, where he has some 1,200 head of beef cattle. Dan, 50, remains in the Wahgi Valley, where he has a beautiful 1,500-acre plantation. To the sons of natives who once tried to kill him he teaches the art of coffee-growing, encouraging them to start small plantations of their own.

Australia is making a mammoth effort to bring the Stone Age people into the twentieth century. Heroes in the effort are the young patrol officers. Learning of a pocket of people not yet contacted, a patrol officer strikes out for the area, accompanied only by a few native assistants, interpreters and bearers. His job is to establish friendly relations and eventually persuade the savages to stop tribal warfare and accept the authority of the white man's government. It is often a case of one man facing as many as 10,000. The job requires not only physical hardihood and bravery but tact and a knowledge of native customs and culture.

Says 28-year-old patrol officer David Hook, "Going in, you have to be ready to be attacked. If there are no women and children around, you'd better look out. You may have to pull back, try again a day or a week later. But as soon as possible you summon the village elders, tell them firmly, 'Government he strong-fella too much. But he no like fightim you-fella; he like shake hands. Government he say you-fella no can killim other fella. Fighting he must finish.' If they reach for their spears, you use your gun—preferably you shoot a pig, to demonstrate the power of the gun.

"That settled, you make it plain that government is prepared to bring them many good things. You open your box of trade items, such as steel axes, shells, salt; show them seeds that will make new crops. Your native medical *aide* treats their ills, promises them in time a medical station. Eventually you work out with village elders a set of laws based not only on Australian laws but on their own codes as well, appointing their head man as *luluai* (government representative). You return at intervals to settle disputes among them and with other tribes."

Hook's station at Kopiago—the most recently opened station in the high Central Range—is a model of what can be done. Though in a territory still unopened even to missionaries, Dave Hook and his beautiful young wife, Christine, have already largely put an end to fighting and murders; they have started schools and farms, introduced such crops as maize, peanuts, cabbage, beans, peas, lettuce, tomatoes and new varieties of sweet potatoes; and improved the people's protein-short diet with chickens and better pig stock.

Missionaries, too, have helped to

bring New Guinea's Stone Agers a better life. At Mount Hagen you can meet the remarkable 68-year-old Father William Ross, a priest who went out to New Guinea in 1926 and has been there ever since.

A miniature of a man (five-foot-one) with a flowing white beard, bright gleaming eyes and a joyous spirit, Ross is an ethnic authority on this part of New Guinea. He was in the Wahgi Valley four years before any government officer arrived. "In those days, believe me, we weren't saving souls; we were saving ourselves," he says. "Our preachment was simply, 'Love thy neighbour. Don't whack him with an axe. Don't pierce him with a spear. Don't steal his mary.' "

When Father Ross came to New Guinea, he was the only Roman Catholic priest in the Territory; now there are more than 750, and 934 Protestant missionaries.

Since the war, Australia has made a great contribution in New Guinea. In 1946 there were no government-operated schools at all; today there are 398 primary, 20 secondary and 20 technical schools, with more than 46,000 students enrolled. In agriculture, tens of thousands of natives are being taught better farming methods. A programme for roads is being pushed forward.

Local government councils are being formed in each locality as rapidly as patrol and district officers can impart the first glimmerings of the democratic elective process. Each council then elects its native representatives to the legislative council in the capital at Port Moresby. Local councils now number 78, representing nearly half the Territory's population. By 1967, predicts Native Affairs Director McCarthy, almost the whole population will be represented. "In another 25 years," he says, "we'll have these people ready to rule themselves. For all their primitive background, they are intelligent; they catch on fast."

But will Australia be given the 25 years? Some nations in the U.N. have been clamouring for "self-determination" for all Trust Territories, however unready. After Indonesia's recent successful grab of Dutch New Guinea—when the U.N. surrendered to Indonesian President Sukarno's bluff and bluster—Australians asked, "How soon will *we* be driven out?"

However, Australia's Prime Minister Sir Robert Menzies has announced, "We will defend both Papua and New Guinea as if they were part of our mainland; there must be no mistaken idea about that." To which tough, able District Commissioner Ellis adds, "To abandon these people would bring chaos such as would make the Congo seem a picnic. The time we ask to finish the job is not unreasonable. After all, what other people in history have been expected to come so far so fast?"

I Recovered from a Stroke

A remarkable triumph over the affliction which, until recently, led only to invalidism

By James Winchester

THE FIRST Saturday morning of January last year I awoke early, before dawn. As I moved to get out of bed, my right side seemed heavy. Trying to lift my right arm and leg, I found them almost wooden. Levering myself, I managed to stand, totter across the room to the bathroom. There I leaned weakly against the door, exhausted.

I had a feeling of bewilderment rather than panic. "What's the matter?" I kept asking myself. My first thought had been that my leg and arm had "gone to sleep." But there was no prickling or tingling sensation.

Awkwardly, almost tripping, I lurched back to the bed, where I sat down. Still no pain, only an immense weariness. I nudged my wife. Sleepily, she wanted to know what was the matter. Trying to explain to her, I became conscious of a difficulty in my speech. It was not so much that I couldn't express myself as that I seemed to have to shape my words before speaking them. It was rather like trying to talk through puffed-up lips after being hit hard on the mouth.

Condensed from Family Weekly

My wife, now fully awake, telephoned our doctor. By the time he arrived, an hour later, my right arm and hand were completely immobile. I could just barely wiggle the toes on my right foot. With my weariness came a mounting anxiety —not about anything in particular, just an overriding uneasiness.

I had had a stroke. I was lucky that it came when it did. Only a dozen years ago, little could have been offered me except chronic invalidism and kind words. Today, much can be done. I've now just about conquered my stroke. Only eight months after my attack, I could work a full day, speak effortlessly, walk nearly normally, and had regained three-quarters use of my leg and arm.

Until my stroke I, like most people, thought that these accidents happened mainly to the elderly. I'm only 45, but stroke in my age group, I found, is common. High-tension jobs, so often blamed, really haven't much to do with it. Only 3·5 per cent of several hundred stroke victims whose cases were studied at the New York University-Bellevue Medical Centre had been stricken under circumstances that might be described as acute stress. More than four times as many housewives as professional people were involved.

The word "stroke" has no precise meaning. It is just a way of indicating the symptoms of cerebrovascular accident—obstruction of the circulation of the blood to or in the brain by haemorrhage, by narrowing of an arteriosclerotic blood vessel, or by clot.

If the stoppage of blood (which supplies vital oxygen to brain tissues) last even a few minutes, it is enough to kill the tissues affected and knock out the things they command—leg or arm movements, speech and memory. If the damaged tissues are on the left side of the brain, the right side of the body is stricken, and vice versa. The extent of the injury depends on which region of the brain is affected, and how widely. Speech is controlled by a small piece of tissue called "Broca's Area." When this area is only lightly damaged, there is just a slurring of words, which usually clears up in a few days, as it did in my case.

At the Northern Westchester Hospital, in Mount Kisco, New York, where I was taken by ambulance from my home, specialists determined the cause of my stroke: the high blood pressure I have had for years had ruptured a weakened part of an artery in my brain, causing haemorrhage. Because I was not unconscious, and because my speech, while slurred, was not seriously affected, the doctors reasoned that the bleeding was not extensive, that nature itself had already stepped in to start patching the hole. This was backed up by the lack of any blood in my spinal fluid.

Until just a few years ago, doctors generally thought that all strokes

were caused, as mine was, by blood-vessel accidents inside the brain itself. But, in the early 1950's, Dr. C. Miller Fisher, of Harvard University Medical School, studying 432 routine hospital post-mortems, found in about ten per cent that one or both carotid arteries had been narrowed or clotted to such an extent that tissues in the brain were deprived of nourishment. This indicated that many strokes were caused by previously unrecognized occlusions in one or more of the four neck arteries supplying blood to the brain. This was quickly ruled out as a cause of my stroke by tests that showed the blood pressure in my neck arteries to be normal. In cases where the neck arteries *are* involved, dramatic new surgical procedures are now being developed.

Shortly after Dr. Fisher's demonstration that not all strokes originate in the brain, science perfected a non-toxic radio-opaque dye which could be injected into the circulatory system. By using rapid-fire X-ray equipment, it became possible to follow the dye—which shows up white on the X-ray film—through the arteries. Where there is a block, a dark shadow appears.

This diagnostic tool enabled Dr. Michael DeBakey, of Baylor University, Texas, to develop surgical methods for correcting a clogged neck artery. He removes the fatty clot which has narrowed the artery channel and further enlarges the passage by means of a Dacron patch. Or, when the blockage is extensive, instead of cutting away the obstruction, he inserts a Dacron artery graft to bypass it. Since 1954, Dr. DeBakey and his associates have operated on several hundred stroke patients with artery blockage in neck or upper chest, and such surgery is now being performed at 20 major medical centres in an evaluation-study of its benefits in comparison with results of non-surgical treatment of stroke patients.

But the most practical advances in treatment and prevention of stroke are the new drugs—those that retard blood-clot formation and those that lower and control high blood pressure. A recent report to the American Heart Association largely credits the latter drugs with a 22 per cent drop in the death rate from strokes among white American males in the 45-to-64 age group. The anticoagulants, used to retard clot formation, may boost a stroke patient's chances for survival by nearly one-third, according to a five-year study at New York Hospital-Cornell and New York University-Bellevue medical centres. In a Mayo Clinic study of patients in whom incipient stroke was diagnosed, the drugs appeared to reduce the actual incidence of stroke due to clotting by 36 per cent.

Two years ago, when my blood pressure shot above the 200 mark and I had to spend a short time in hospital, I was given the new drugs to help lower and control it. They

worked well, but left me severely depressed. Against my doctor's advice, I stopped taking them. My blood pressure shot back skyward, and my stroke appears to have been the result. Now I'm taking them again—two aspirin-size tablets a day—and I'm determined to keep on doing so.

Once a patient has had a stroke, however, he discovers that the real miracle worker is rehabilitation. Stroke no longer means the end of a person's useful life—if rehabilitation begins early enough. Exercise of seemingly useless muscles must begin at once, since inactivity can be more harmful than the original damage caused by the stroke. At first the muscles and nerves in paralysed parts of the body are as good as ever; only their control centres in the brain are damaged. But muscle and nerve deterioration sets in quickly when the victim is immobile. Other things happen, too: circulation slows down; calcium leaves the bones; the patient can quickly acquire the attitude that he is an invalid.

I was sitting up in bed the first day after my stroke. On the second, I was standing, assisted, though my leg was completely paralysed. That same day, the hospital's physiotherapist began exercising my muscles with gentle massage every two or three hours, although I still couldn't move them myself. Before the end of the week, with help, I was making my way across the room to the bathroom. Every day I sat in a chair while my bed was being made.

Says Dr. Howard Rusk, who heads the New York University-Bellevue Institute for Physical Medicine and Rehabilitation, where I was transferred for intensive physiotherapy ten days after my attack: "If simple physical therapy begins within the first week after a stroke, most victims can be walking and taking care of themselves in six to eight weeks, sometimes sooner."

The best thing the family can do for stroke patients, I learned, is *not* to treat them as invalids. My wife, bless her, assumes that I can do anything. Somehow, though, she always seems to be around when I'm putting on a shirt, and it's just *natural* when she casually helps me with the cuff button on my left sleeve. I don't feel dependent. Believe me, that's important.

Recovery for a stroke victim isn't easy for either the patient or his family. Physically, the patient may look and feel fine. But a part of the brain *has* been destroyed. Only nature and time can train new tissues to take over. Until they do, there are bound to be emotional changes. For example, during the recovery period, stroke victims are, almost without exception, irritable and snappy, and likely to cry easily.

I spent over two months under Dr. Rusk's supervision, and still get hospital-administered physiotherapy for two hours a day, three times a

week. I've been most fortunate in such care. But excellent results can be achieved at home. No exercise should ever be attempted without specific instructions, however, or without regular checkups by your doctor.

Many common household items are better for exercising than expensive contrivances. Early on, I practised walking by using the backs of two chairs, sliding them over the kitchen linoleum in the same rhythm the arms normally follow when a person moves. "Much better than crutches," says Dr. Rusk.

Opening a sealed tin of coffee is a good exercise for strengthening the wrist and finger muscles. Also, I play cards with my family every evening. At first I couldn't pick the cards off the table with my weakened fingers, much less hold them. Now I can even shuffle a pack, after a fashion. I'm practising penmanship with my bad hand daily, doing several minutes of old-fashioned loops and ups-and-downs, as I did at school. Plain walking, particularly up and down stairs, is just about the best therapy for a stricken leg.

For the stroke patient, the ability to do things even half-way normally is a powerful incentive to get well. Recently, I met an old acquaintance who didn't know I'd been ill. His first words were, "I haven't seen you looking so well for years." He refused to believe me when I told him what had happened.

Ruler of the House

Ask the measurement of a room in our house and my wife will tell you it is 3½ by 2½ *Freds*. What's a *Fred*? I'm a *Fred*—all 72 inches of me. If my wife lost me she would be losing more than just a husband; she would be losing two yardsticks.

There are several ways of arriving at a half-*Fred*, but my wife finds that if a chalk line made at a point where my head ends, as I lie extended beside a wall, coincides with my belt buckle after I have snaked my way to the end of the wall, a half-*Fred* is accomplished. Perhaps it would be easier to buy a tape measure, but in our family a tape measure is easily lost and, once lost, it's lost. A misplaced husband will come back when he's hungry.

—Fred Bachmann

Everything Stops for TEA

The story of one of Britain's national institutions—the tea break

By Leslie Hannon

At approximately ten in the morning and three in the afternoon of each weekday, the British nation comes to a standstill for ten fully-paid minutes while some 23 million workers in shops, offices, mines and factories participate in the traditional rite of the tea break.

In one year, the devotees of this ritual will sip 850 million gallons of tea—enough to float 50 ships the size of the *Queen Elizabeth*.

Many employers wonder if these cups of tea are really necessary. Two ten-minute tea breaks a day add up to two working weeks' tea-drinking a year—with pay. But the tea break has become a jealously-guarded right, and strikes often follow any managerial encroachment on it. A tea break is written into union agreements in many major industries, including car manufacturing, cement, glass and pottery, railway workshops, and building.

When bricklayer Edward Butcher was sacked for taking an unscheduled tea break while working on London's Hilton Hotel, 600 men instantly walked off the job in sympathy. "Having a cup of tea is a right that no one is going to take

Adapted from an article by Leslie Lieber in This Week Magazine

away," said Butcher when he was taken on again a week later.

In 1961, Ford's 37,000-worker plant at Dagenham, Essex, was brought to a standstill by an unofficial stoppage in protest against a union agreement to cut the morning tea break to five minutes.

The same year, more than 1,000 plumbers, painters, tilers and woodworkers from Mersey building sites marched in protest through the streets of Liverpool. "Hands Off Our Tea Break," read the placards. "Pay as you Urn." Construction companies had ruled that the men must not leave the job to get tea from canteens and near-by cafés. Similar tea-break strikes spread to Sunderland, Hull, Nottingham and London—where pickets successfully halted all work on the reconstruction of No. 10 Downing Street, the Prime Minister's residence.

How did the tea break become such a national institution? Here are some milestones that led Britain into first place among the world's tea-drinkers.

China, 2737 B.C. The legendary Emperor Shen Nung, known as the Divine Healer, always had his drinking water boiled. One day unnoticed by the cooks, some leaves from an overhanging bush fell into the pot. When he tasted the infused water, the Emperor found it marvellously refreshing and insisted that the same leaves, from the wild tea bush, be added to his drinking water thereafter.

Amsterdam, A.D. 1610. The wife of a Dutch merchant trading with the East sent an English friend a pound of the *tcha* her husband brought home from Cathay. The Englishwoman cooked the leaves and served them to her guests with butter, salt and pepper. Trendsetters of the time were soon infusing the drink and storing it in barrels to be drawn off and warmed up to order.

Folkestone, Kent, 1700. On moonless nights, cutters from Holland lay offshore while Kentish smugglers ferried home boxes of contraband tea. The government had clapped so much duty on tea imported from the Continent at 11*d.* (less than Rs. 1) a pound that the London price became 20*s.* (Rs. 13·3)—the wages of a farm labourer for a month.

Peterborough, 1960. The F. Perkins diesel engine company reported that it had mechanized the tea break, using Britain's first tea-vending machines. Perkins' 7,000 workers now have continual access to 39 machines sited near their work benches.

Today the tea-machine business in Britain is booming. In 1961, one vending company sold one million cups of tea during the year; in 1962, the same amount was sold in a single month. The tea break—that traditional, well-sugared sweetener of the day's work—has become one of British industry's most precious fringe benefits.

You are carrying in your body, today, substances that were born millions of years ago in the fiery cradle of a star

The Amazing Biography of an Atom

By Dr. J. Bronowski

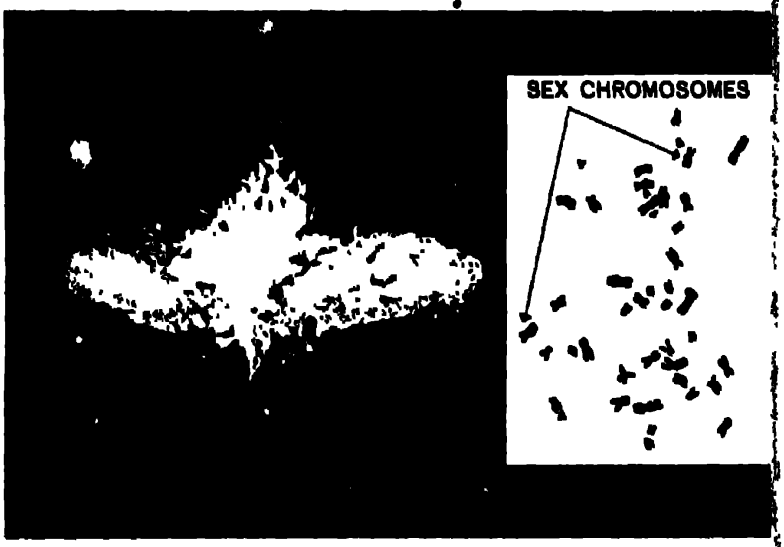
"This is the profile of a single atom: its looks and its birth, its career and its place in the world. Of the 100 or so different kinds of atoms, it seems natural to choose the one that enters most intimately into the processes of life. So I shall choose an atom of carbon, because the cells of all living things are full of carbon atoms. So far as we know, there cannot be life anywhere in the universe without them.

Of all the carbon atoms in the universe, I shall choose one in *your* body; an atom in the sex chromosome-X, one of the minute heredity-determining bodies which your

Condensed from The New York Times Magazine

MACROCOSM AND MICROCOSM

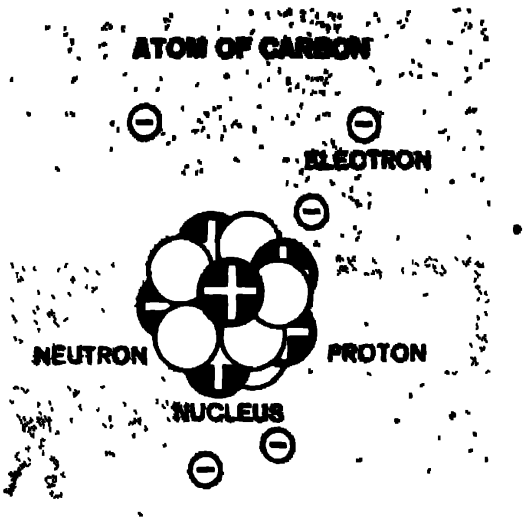
The exploding galaxy spews out uncountable trillions of atoms into the universe From such an explosion one atom of carbon found its way to earth, and there ultimately became part of one of the two sex chromosomes, marked by arrows, among the 46 chromosomes of a single female human cell (inset at right)



mother passed on to you at the moment you were conceived, and which has lain snugly in one of your cells from that day to this.

What does a carbon atom look like? Nobody knows. Nobody knows what any kind of atom looks like. It is too small to be seen. So we must ask, instead: What are the parts that make up the carbon atom? And how are the parts put together?

An atom of any substance is the smallest piece which is characteristic of that substance and of nothing else. But all atoms—whether hydrogen or oxygen or carbon or gold or uranium—are put together from the same smaller fundamental particles. Of these, three are the most important. They are: protons (electrically positive), neutrons (electrically neutral) and electrons (electrically negative).

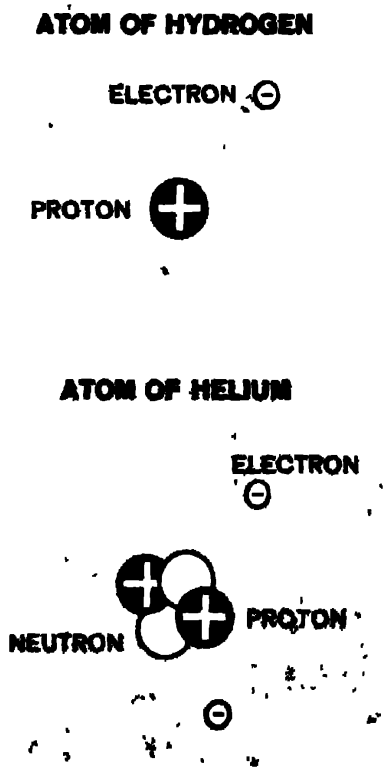


Moreover, all atoms have essentially the same structure. At the centre there is a heavy kernel or nucleus made up of protons and neutrons tightly bound together; on the outskirts are the electrons, in constant movement, circling the nucleus much as planets circle the sun.

The only difference in atoms lies in the number of particles from which they are assembled. Each has a characteristic number. The nucleus of hydrogen, for example, has one proton; the nucleus of helium has two protons (and usually two neutrons), and so on up the ladder of nature's 100 kinds of atoms.

The nucleus of carbon comes sixth on this ladder; it has six protons and, usually, six neutrons. Around this nucleus circle six electrons.

Because the nucleus has a positive

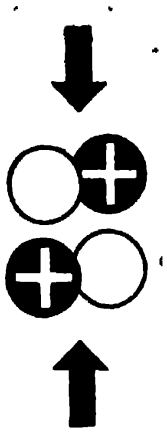


electric charge, and the electrons around it are electrically negative, the two attract each other, and there is no urge for the whole atom to fly apart.* The atom I have picked out in your X-chromosome is constructed like this.

But where does the character of the carbon atom lie? What is it about this structure that is characteristic of carbon and nothing else?

Must it have all six electrons, for example? No. Some of the electrons may wander off, or they may all be stripped away, and yet the nucleus will still remain carbon. Then must there be exactly six neutrons in the nucleus? No. There are variants (isotopes) of carbon which contain one or two additional neutrons. The character of carbon lies in one number only. To be carbon, an atom must have six protons in its nucleus, neither more nor less.

HEAVY HYDROGEN NUCLEI FUSING TO MAKE A HELIUM NUCLEUS



How did the atom of carbon come to be constructed? Was it literally put together from its parts? The answer is yes. This atom has a history, and a remarkable one. Long before it came to earth on its cosmic journey from the infinite spaces to your X-chromosome, it was born in three violent stages.

The birth began in a young star. A young star is a mass of hydrogen

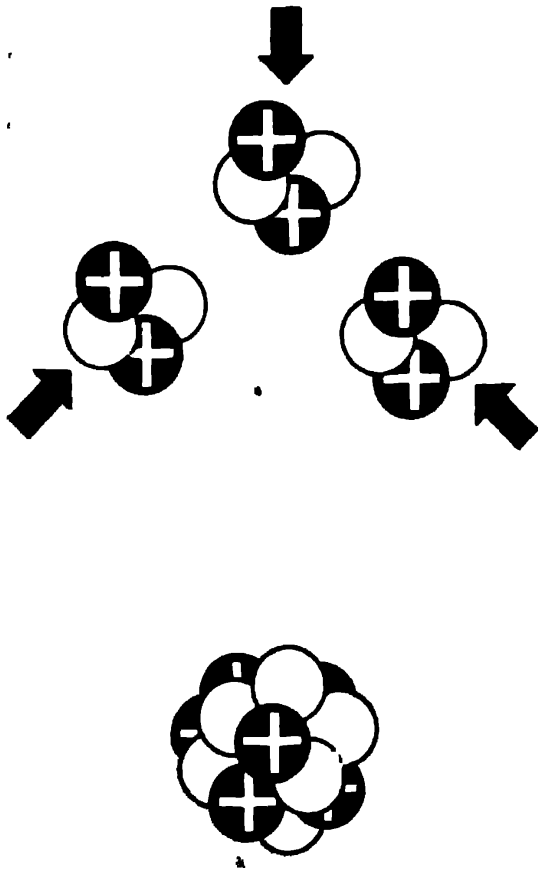
* Things are different inside the nucleus. There the electrically positive protons ought to repel one another and fly apart. They do not. Something joins them—we do not know how or what. However, when a nucleus is split, we can sometimes see this inner force fly out and solidify for an instant into small particles that are heavier than electrons but lighter than protons or neutrons. Called mesons, these extraordinary particles (even physicists call them "strange") live less than a millionth of a second before they disappear, yet scientists believe that they do have some reality inside the nucleus.



DR JACOB BRONOWSKI is both scientist and man of letters Once a professor of mathematics, he became Director-General of Process Development for Britain's National Coal Board in 1959. In January he was appointed Resident Life Fellow of the Salk Institute for Biological Studies at San Diego, California He has written verse, biographies, radio plays and scientific works that have won critical acclaim.

nuclei—that is, of protons—and because the star is hot, the protons are moving about very fast. From time to time, one proton runs headlong into another and overcomes the electrical repulsion between them. When this happens, one of the protons loses its electric charge and changes into a neutron, and the pair cling together as a single nucleus of a substance called deuterium, or heavy hydrogen. This nucleus will in time capture another proton and neutron; it then becomes a nucleus of helium. This is the fundamental process of fusion in the stars by which the primitive hydrogen of the universe is built up into a new basic material, helium. And it is the first stage in the birth of the heavier atoms.

THREE HELIUM NUCLEI FUSING TO MAKE A CARBON NUCLEUS



After several hundred million years, the star—now no longer young—is almost all helium. Now the helium atoms begin to run into one another. Every so often, not just two but three helium atoms crash together at the same moment. This is the second and critical stage of birth—the moment when the carbon nucleus is truly born. The atom of carbon whose biography we are considering was born by this extraordinary treble coincidence millions of years ago.

How then did the carbon atom get to earth? The ageing star went on building up carbon atoms and other heavier atoms from its helium. In time, crowded with heavy atoms, it exploded. The carbon and other atoms were scattered through space and became mixed with the thin sea of hydrogen which fills space.

Later, when a fresh star began to form from this hydrogen, it caught up some of the carbon and other atoms with it. There are fresh stars being formed like this all the time; one of these fresh stars was the sun, formed three or four thousand million years ago. Some time after that, a cosmic accident pulled the earth and the other planets out of the sun. Your carbon atom was part of that vast hot tongue of matter, which,

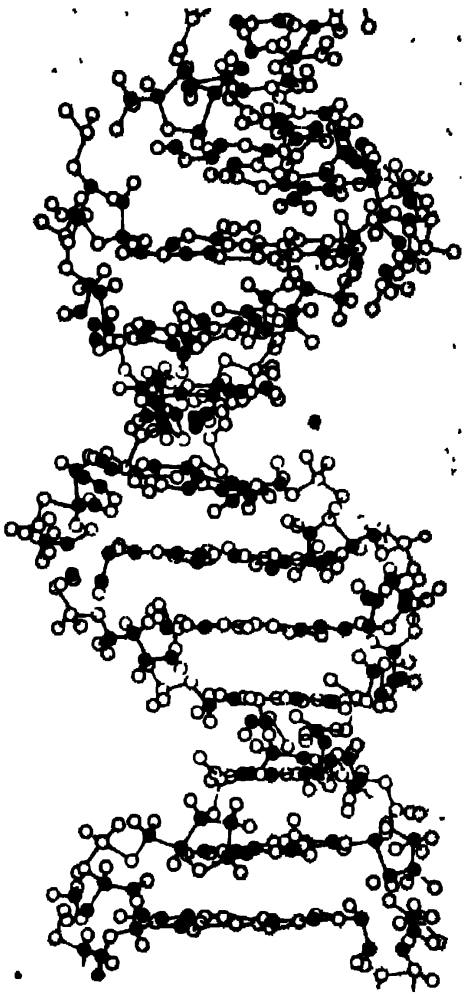
when it cooled down, made the planets. That was the third violent stage in the birth of every carbon atom on earth.

Your carbon atom has been unchanged ever since. It has been part of many different things, dead and alive, in that time. But always it has remained the same carbon atom.

At one time your carbon atom may have been part of a diamond—a pure crystal of carbon and nothing else. Then it may have been rubbed off, and joined with two atoms of oxygen to form carbon dioxide. The carbon dioxide would have been breathed into the leaves of a plant, and there turned into sugar. That plant was perhaps eaten by a cow. One of your forefathers may have drunk the milk of that cow, or eaten a steak from it, and the carbon atom might have been in either.

In the body of your forefather, the carbon atom slipped into one of his chromosomes, which pass hereditary instructions from parent to child. In time it became part of one of the two X-chromosomes which your mother carried in many cells and so slipped into the ovum from which you grew. You, in turn, may yet pass this atom on to a child.

If the carbon atom is still in your body when you die, it will return to the soil, and there a plant may take it up again in time, sending it once more on a cycle of plant and animal life. Next time this carbon atom enters a human body, it may form part of a bone or a fingernail or a strand



SMALL PART OF A HUMAN CHROMOSOME
BLACK DOTS REPRESENT CARBON ATOMS

of hair. Then it may get into the air again as carbon dioxide, and pass in and out of the lungs of human beings for thousands of years. The air in a man's lungs at any moment contains 10,000,000,000,000,000,000,000 atoms, so that sooner or later every one of us breathes an atom that has been breathed before by any one you can think of who has ever lived—Michelangelo or George Washington or Moses. Your carbon atom will be breathed by some genius of the future.

And further on, in a more distant

time, your carbon atom may get into the bloodstream of an animal that has not yet evolved. Thereafter, it may return again to the soil and lie dormant in some mineral for millions of years. And, in time, its cycle of life may begin again.

Will this cycle ever end? We do not know. Your carbon atom has been unchanged, as an atom, for 4,000 million years and more, and there is no reason why it should not go on for ever. Even if the earth is burned up at last by the sun, your carbon atom may go back into space and be swept again into some fresh star.

In a star, and only in a star, can its identity at last disappear. There it may be broken apart by violent atomic collisions and its pieces built into other atoms.

Then, and only then, will the career of your carbon atom be at an end. Like you, it will have died as an individual. But, like you, it will survive its death, and become, perhaps, part of the life of a new individual—part of new atoms with a new identity.

The Virtue of Ugliness

In London, go to that most interesting museum, the National Portrait Gallery. There you will find portraits of all the men who for the last 400 years have been important in every profession in England. You will be struck by their prevailing ugliness—great archbishops, distinguished scholars, statesmen and men of affairs.

Ugliness has positive moral values. First, the man afflicted with it is thereby deprived of a too-easy success in love; this deprivation spurs him all the more eagerly to conquer—he has only the brilliance of his accomplishments by which to please.

Moreover, ugliness in a man, if it accompanies strength, almost always prejudices one in its favour. His superiors rarely have a feeling of jealousy towards a really ugly man; nor are they indifferent to him. One remembers unusual features rather than a handsome but commonplace head.

—André Maurois

* * *

Help Yourself

When I was young, I wanted everything and all at once, until our old Scottish minister explained things like this:

One night he dreamed that he saw a new shop in the High Street. He went in, and saw an angel behind the counter. Nervously he asked what the shop sold. "Everything your heart desires," the angel said.

"Then I want peace on earth," cried the minister, "an end to sorrow, famine and disease . . ."

"Just one moment," smiled the angel. "You haven't quite understood. We don't sell fruits here—only seeds." —Contributed by M. L. Grassick

"Repeat Three Times Rapidly"

By Charles Francis Potter

I used to regard tongue twisters merely as a childish pastime of my boyhood, which our elders permitted because these oral tricks were supposed to teach us to speak carefully. However, since I started collecting them I have found that they perform many more functions.

An opera singer wrote to tell me that twisters are a part of her daily practice grind. Radio announcers, I am told, are often required to recite difficult twisters as tests; for instance:

The seething sea ceaseth and thus sufficeth us.

To make her mouth small, one woman was told when a little girl to purse her lips and say:

Fanny Finch fried five floundering fish for Francis's father.

One man credits "She sells sea shells" with having cured him of lisping. I wonder if he can lisplessly say:

The sixth sheikh's sixth sheep's sick.

A young woman writes that her dentist father makes patients with new plates practise on:

Amidst the mists and coldest frosts,
With barest wrists and stoutest boasts,
He thrusts his fists against the posts
And still insists he sees the ghosts.

Here is a difficult old English tongue muddler:

She stood at the door of Burgess's fish-sauce shop welcoming him in.

Try this delightful dialogue between the duchess and the tinker:

Are you copperbottoming 'em, my man? No'm, I'm aluminiuming 'em, mum.

Here are some of the older tongue twisters. Remember, you have mastered none until you can repeat it three times rapidly and correctly.

Truly rural.
Strange strategic statistics.
Tie twine to three tree twigs.
Six slim slick slender saplings.

New twisters are constantly appearing, either accidentally or by deliberate creation. For example:

Preshrunk shirts.
Double bubble gum bubbles double.
A bloke's back brake block broke.

And now, if your tang is so tungled that you cannot stalk trait, try three doses of old-fashioned:

Lemon liniment.



The wife of the President of the United States has already proved she can lead several ways of life simultaneously. Here she tells of living

America's New First Lady

By Blake Clark

HER LIFE is often hectic, but never so nightmarishly and unexpectedly so as on that fateful day of last November 22. She became First Lady of the United States under the most unpredictably tragic circumstances. She saw her husband take the oath only two hours after his predecessor, John Kennedy, had been assassinated. With her in the forward compartment of the Presidential plane at

Dallas's Love Field, where the swearing-in took place, was Jacqueline Kennedy who, in the preceding years, had become her personal friend and whom she had so often relieved of chores normally the portion of the President's wife.

During the years of her husband's Vice-Presidency, Lady Bird Johnson was Washington's No. 1 substitute in an emergency. She came capably to the rescue of President Kennedy when pressures of state kept him from making scholarship presentations. Because Mrs. Kennedy had small children, and strong interests in other fields, many political activities were handled for her by Mrs. Johnson. She also on occasion received official guests, and stood in for her husband and other administration members when they were unable to keep speaking engagements. She can make an effective political speech, then charm the voters individually at a reception.

On the evening of May 22, 1962, for instance, she was looking forward to an occasion at which she had only to be present as her husband, then Vice-President, received the second annual Peace Through Health Award. But late that afternoon came a call from the White House. Mrs. Kennedy, for her film on the White House, was to be given a television award for public service, that very evening. But she had a previous commitment. Could Mrs. Johnson possibly receive the trophy for her?

Mrs. Johnson could. Changing into a dress appropriate for both occasions, she met her husband at his award dinner and explained that she would have to leave the head table briefly. This she did, taking a car to a near-by hotel. With only five minutes left, she went into a phone booth and studied what to say. Then an escort took her to the banquet hall, where she faced the audience and television cameras and, on a nationwide broadcast, made a gracious acceptance for Mrs. Kennedy. Minutes later she reappeared at the first hotel in time for the presentation to her husband. She had carried it all off so swiftly and smoothly that she had hardly been missed.

There was little in Mrs. Johnson's early life to foretell her development into the kind of versatile person who is confident and at ease in the public eye. Born in the town of Karnack (population 100) in East Texas, she was christened Claudia Alta Taylor. A nursemaid said, "She's as pretty as a lady bird," and thus gave her the name everyone calls her today. There are times when she would prefer Claudia Alta.

She was left motherless at five. Her father, a big, powerfully-built man, ran two country stores and cotton gins several miles from town; a sign over one of his places announced, "Thomas Jefferson Taylor, Dealer in Everything." Lady Bird was a good student—but

so shy that when it looked as if she might carry off the school honours and have to make a speech, she prayed to get smallpox or lower marks! She was enormously relieved when two other girls got four-year averages of 95 and 94½ to her 94.

It was years before she conquered the shyness. Marriage helped. "Lyndon saw more in me than I saw in myself," she says, "and he expected more than I realized I could do."

Becoming involved in his career, she had to overcome reticence. "If you want people to do something, like vote," she observes, "you must reach out to them. You believe in something deeply and become wrapped up in it, and you forget to be shy."

After getting degrees in liberal arts and journalism from the University of Texas, Lady Bird stayed on in Austin. There, one day in 1934 in the office of a girl friend, she met Lyndon Johnson, at that time secretary to Congressman Richard Kleberg of Texas. He was excessively thin—but a very good-looking man, she thought, with lots of dark wavy hair. He was also the most outspoken, straightforward, determined person she'd ever encountered. "I knew I'd met something remarkable," she says, "but I didn't know quite what."

He asked her to meet him for breakfast next morning. She hesitated, then agreed. After breakfast, they went for a ride. He volunteered all kinds of personal information—his salary, how much insurance he carried, what each member of his family was like—then asked her to marry him. She refused to say yes or no. But after two months of daily phone calls from him in Washington, and finally a "now or never" ultimatum, she accepted his proposal.

In 1937 the elderly Congressman from their district died. Lyndon, though generally conceded to have little chance, stood for the seat with his wife's support and won it. On December 8, 1941, the day after Pearl Harbour, he joined the Navy. Although Lady Bird had never worked in his Congressional office, she took over the management of it, and ran it as Lyndon's link with the people of their district. She served without pay.

Each day brought an infinite variety of problems and demands that left her exhausted. But the work gave her a particular insight into her husband's job—plus the feeling that she could stand on her own feet. Without that experience of constant problem-solving, she might not have had the confidence to try her wings as a businesswoman. But when the opportunity came in 1942, shortly after all members of Congress were called back from the armed services, she did not hesitate.

A small Texas radio station, KTBC in Austin, was for sale.

Knowing how insecure the tenure of elective office can be, the Johnsons had often wished for a business of their own, something to return to after Washington. Not having the money for a newspaper, they settled on KTBC, and swung the deal for 21,000 dollars plus the station's debts.

From a small radio station "in debt to everybody in town," with only nine employees and only 250 watts of power, KTBC has grown to over 100 employees, full association with the national Columbia Broadcasting System, a sizeable staff of local news gatherers, and a building of its own from which a 5,000-watt radio and a multiple-panel television station do a thriving business.

When the Johnsons acquired it, KTBC was losing 2,000 dollars a month. Lady Bird went out to see why. She stayed on the job day and night for five months, until, in August 1943, the station showed a profit of 18 dollars. Then she returned to Washington. But she kept close watch on the enterprise through detailed daily and weekly reports. And she handled her investment with drive and finesse that many another business executive might envy. A few days after Johnson became President of the United States, this and other holdings were put in trust to guard against any possible charge of a conflict between private and public interest.

Two daughters—Lynda, born in 1944, and Lucy, born in 1947—added to the fullness of a busy life. So did political campaigning. Before the war, Lady Bird had not done any electioneering herself. In the 1948 contest for the Senate, though flying made her ill, she flew all over Texas representing her husband before small groups of women voters.

Two days before the election she was in a car that turned over twice. She got out of the mud, drove on to the next town, where she stood in a reception line in a dress borrowed from her hostess. Then she met Lyndon in San Antonio and made a speech without telling her husband about the accident! The next day she and Lyndon's mother and three sisters rang up everyone in the Austin telephone book, urging them to vote for their man.

When it was all over, in an election where more than a million went to the polls, Lyndon won by 87 votes. Ever since, the once-shy Lady Bird has been an active campaigner, and an invaluable one.

A reporter once asked Mrs. Johnson to describe her activities.

She said, "Well, take today for example. At nine o'clock I had a Spanish lesson, interrupted to make an appointment for Lynda with the dentist and for Lucy with a geometry tutor; 11 o'clock, I opened the National Cathedral Flower Show; one o'clock, attended luncheon for the Heart Fund drive, with 'appropriate remarks' in hand; 2.30 to 5,

I answered mail; five o'clock, entertained 35 students en route to Chile with the Peace Corps; at six, an emergency call had me dispatching Lyndon's dinner jacket to the Capitol; then I dressed and joined him at 7.45 at the White House for dinner."

Said the reporter, "I know, Mrs. Johnson, but what do you really *do?*"

"Actually," she said, "that question is one that I suppose every woman, and especially every wife involved in public duties, asks herself. With all the demands on you, you undergo what Anne Lindbergh called 'fragmentation of self.' You just hope that all your efforts add up to something worthwhile. But the day *does* come when you see results. You are able to speak Spanish to the President of Venezuela. Lucy's lessons improve. The flower show and the Heart Fund make their goals. And in the mail comes the letter of an elderly pen pal: 'Heaven bless you for your recipe for corn-bread dressing!'"

How ever does she get so much done? "I make little lists—and scratch 'em off." The "little list," her planned programme for the day, keeps her moving. Even at the beauty parlour, for example, she will have with her a suitcase-size Mexican straw bag containing odd jobs. Under the hair drier—"It's a good uninterrupted 40 minutes"—she reads letters and reports, signs cheques and makes plans for tomorrow.

"Every once in a while I yearn for nothing to do," mused Lady Bird ruefully in the days shortly before her husband became President. "But then of course I realize I'm glad I'm busy. As I travel round the world with Lyndon I often think of that funny old sign on my daddy's store, 'Thomas Jefferson Taylor, Dealer in Everything.' Now science and time and necessity have propelled the United States to be the general store for the world, dealers in everything. Most of all, merchants for a better way of life, I hope. And the world is full of eager buyers, thirsty for knowledge and hungry for freedom."

In that world, America's new First Lady—active, versatile and concerned—is an admirable and true representative of her country.

Crying Wolf

AN AGEING Casanova was complaining that he was not as rich as reported. He listed some of his expenses—rent, office space, phones, secretaries. "And," a friend reminded him, "don't forget all that sheep's clothing."

—Leonard Lyons

One of the most important things an adult can do for a child is to leave him alone

Kids Should Be Bored Sometimes

By Robert Wells

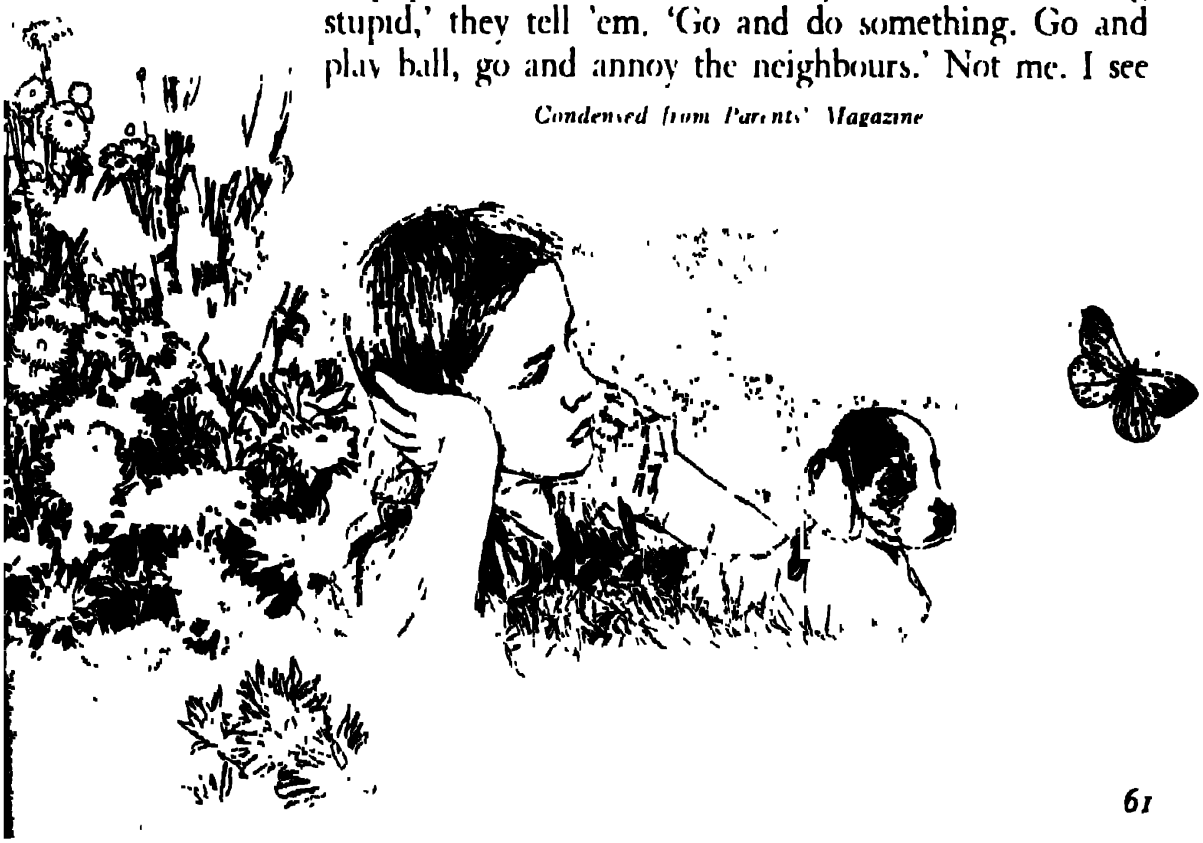
FIVE YEARS AGO, when my youngest son was four, a philosopher came to clean our septic tank. He didn't look like a philosopher, but I knew he was one as soon as we began talking about children. He jerked his head in the direction of Bobby, who was lying on his back in the grass, staring up at the shifting patterns made by the leaves of a black-walnut tree.

"He's bored," the man said. "That's good."

"That's *good?*" I asked.

"Certainly. The mistake a lot of people make, they keep pushin' their kids. 'Don't just sit there looking stupid,' they tell 'em. 'Go and do something. Go and play ball, go and annoy the neighbours.' Not me. I see

Condensed from Parents' Magazine



to it my kids have a chance to get bored."

"Why?"

"They get bored and pretty soon they're going to start thinking." Bobby had turned over and, chin on his hands, was watching an ant drag a dead fly through the jungle of grass blades.

"See what I mean?" the septic-tank philosopher said. "If you'd told him to go and study ants, he wouldn't do it. But he got bored lying there. So now he knows something about ants."

Another observer reached a similar conclusion. In *The Conquest of Happiness,* Bertrand Russell blamed modern parents for failing to realize the advantages to the young of "fruitful monotony."

"A generation that cannot endure boredom will be a generation of little men, of men unduly divorced from the slow processes of nature, of men in whom every vital impulse slowly withers, as though they were cut flowers in a vase," he wrote.

The septic-tank cleaner and Bertrand Russell were right. Unless we are careful, we will rob our children of their birthright—the leisurely, pressure-free hours when a child is thrown on his own resources, forced to become acquainted with himself.

"What shall I do?" he asks himself. And if there is no easy answer —no parent-organized games, no flick of a radio switch—he may progress from this first question to others: "Who am I? Why am I here? Where am I going? What shall I become?"

When adults, with all goodwill, take over the organizing of activities, the natural spontaneity of childhood is lost. Recently when I was visiting a friend in the suburbs his son, who is 11, came home in his football togs wearing a disgusted expression. "The referee didn't show up," he said, "so we didn't play."

Can boys have changed that much? When I was 11, the thing that might have stopped us from playing football was not the absence of an adult but the unexpected presence of one.

When I was a boy no one expected very much of me. I had to do certain chores, stay out of serious trouble and go to school when it was in session. But the rest of my time was my own. If I was bored, that was my problem.

I remember once complaining to my grandmother that I had nothing to do. She took me by the hand and led me out on to the big front porch, where a succession of fiercely preoccupied bumble-bees plunged headlong into the blue morning-glory blossoms. The sounds and smells of summer were in the air.

"Nothing to *do?*" she said, an impatience in her voice I did not understand. "The world is there. Go and use it."

I have the picture of my grandmother gesturing impatiently and

presenting me with the earth and the skies above it, but then the screen of my memory goes blank. I suppose I accepted the gift, grumbling, then went to seek my bored contemporaries.

Perhaps we finished up sitting under a tree, talking. After we got tired of talking we would shoot marbles or play catch or see which one of us could hold his breath the longest. We had plenty of time for things like that, for the days were longer then than they are now. Now they are too short, even for children.

"Karen hasn't got a free moment," a mother brags at a cocktail party. "After school she has her ballet, music, riding lessons. On Saturday nights she goes to the school hop. The other nights she does her homework. She never has time to be bored."

Poor Karen. She is ten, but already the adults have her life firmly in hand. In a few years she will be going out with the boys she has met at the school hops. She will be able to dance with them and make intelligent conversation about radio programmes. She will be ready to shine—in the competitive world in which popularity is measured quantitatively.

But how much at home will she be with herself?

Boredom can be constructive. I can see evidence of it through my window. We live on farmland, and in the woods near the house are the beginnings of a pond which had its birth last week-end. John, who is 17, and Bobby were tired of playing catch.

Their father, full of strange ideas about what's important, had refused to repair the radio. It wasn't quite hot enough to go swimming.

And so they were sitting in the woods, bored to frustration, when John said it would be nice if there were a pool there under the quaking aspens, and Bobby said, yes, so why don't we dig one? Not a swimming pool, but a place where we could plant water lilies and perhaps have some goldfish to eat the mosquito larvae. Yes, said John, and perhaps we could talk Dad into buying a circulating pump, and we could have some rocks at one end of the pool and a concealed pipe in the rocks, with the water trickling over them and making a pleasant splashing sound.

And so they got spades. And when I came home we had a hole in our woods two feet deep and 14 feet across at the widest spot. I was handed a hoe and told I could have the honour of mixing cement with sand and water in the wheelbarrow.

"That is, if you think having a pool is a good idea," John said. "If you don't, I suppose we can fill up the hole."

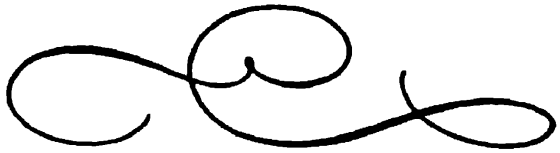
It was a good idea. It would have been easier to get the radio repaired, and, considering the price of cement and of the circulating pump, it would have been cheaper;

but I take a stand with Bertrand Russell, who wrote:

"The pleasures of childhood should in the main be such as the child extracts himself from his environment by means of some effort and inventiveness. We are creatures of Earth; our life is part of the life of the Earth, and we draw our nourishment from it. To the child even more than to the man, it is necessary to preserve some contact with the ebb and flow of terrestrial life."

My own hands blistered, and back aching, I suggested to the boys that we all slow down and finish the pond another day. "This is pretty hard work," I said.

Bobby corrected me. "It *would* be hard work if we *had* to do it," he said. "But nobody told us to dig this pool. We just dreamed it up on our own."



Out on a Limb

ONLY A MAN would do this to his wife, says a woman whose husband whispered to her as they arrived at a party, "Your left stocking seam is crooked."

Hastily she made adjustments without being noticed in the crowd. Then she whispered to him, "Is the right seam all right?"

"Yes," he replied. "It's seamless." --M H.

Line of Least Resistance

RANDOM HOUSE, book publishers, asked one of its authors to write his own promotion copy, with happy results. The author is Norton Juster, whose new book on lower mathematics is called *The Dot and the Line* and whose release runs: "Together again! You loved them in Kepler's *De Motibus Stellae Martis*. You took them into your hearts with Descartes' *Discours de la Méthode*. You thrilled to them in Euclid's *Elements*. And now once again they are brought together in the anguished story of a straight line who falls desperately in love with a dot. See the wanton dot throwing her life away on a disreputable squiggle! See the helpless line tortured by his own insidious fantasies! See the epic confrontation of lovers! See it all in the book that will do for geometry what *Lady Chatterley's Lover* has done for gamekeeping!" – M. D.

LIFE'S LIKE THAT

When my husband was transferred to a small town we moved into a house in a new estate. Since we were strangers there, we had some misgivings about the neighbours. After several hectic days of unpacking and getting settled, I was awakened one morning by the sound of an electric mower.

I looked out to see our nearest neighbour mowing a path through the vacant plot which separated their house from ours. This simple gesture of trust and friendliness from a man who had not even met us yet did more to make us feel at home than any words of welcome. —V Martin

During major alterations to a building at Harvard University last year, a labourer paused during his demolition work and turned to me. "I helped to build this place in 1929," he said. And then he added with a sense of wonderment, "They paid me 60 cents an hour to build it. Now I get three dollars an hour to tear it down."

—Charles Babcock

Last winter in Florida, I drove a friend to a clinic several days a week for a series of treatments. Each time we parked her Rolls-Royce, the coin we put in the meter carried us through.

One day the appointment took longer, yet when we came out we saw the meter was still ticking merrily along with plenty of time left on it.

There was a note tucked beneath the windscreen wiper. On it was written: "I noticed the parking meter was at zero. Forgive me, but have renewed a dime's worth. We cannot have the police deface a Rolls with a ticket, can we? (*signed*) An English butler passing by." —Harry Lyons

When I began my teaching career this year, I made a firm statement of what kind of work I expected from my pupils.

I closed my little speech by saying it would take far more than a mere "apple for the teacher" to receive a passing mark.

Apparently I had made my point. On the following morning one of my pupils presented me with a melon.

—Cecil Tisdell

My husband and I are one of many teenage couples. However, we hardly realized how precarious a marriage like ours might seem to some people, until the day my sister-in-law introduced us to an elderly lady. All she could manage was, "Oh, goodness, how young!"

Then she made a quick recovery. "But won't it be fun," she said, "growing up together." —D. H. B.

I HAD OFFERED to drive my new neighbour, a widow in her early 70's, to the shops. When I stopped at her house, she came out dressed up as though she were going to a tea party.

Surprised that she had gone to such trouble just for a grocery-shopping trip, I complimented her on her appearance.

She said, "I'm merely following the advice my mother gave me many years ago. She loved to ride, and her motto was: Always wear your spurs; you never know when you may meet a horse!" —EILEEN HUNTER

THE VOICE on the telephone told me I must have dialled the wrong number.

"Are you sure?" I insisted.

The stranger replied quickly, "Have I ever lied to you before?"

—MICHAEL SILEN

EARLY one Saturday morning my father went to a timber-yard and ordered panelling for our play-room. The supplier asked him, "Do you want us to wait until Monday to deliver it?"

"I'd like it today if you could manage it."

"Oh, we can manage it all right," the man answered. "But we always ask first. Some men don't want the stuff delivered on Saturday because the wife starts nagging them to get the job done over the week-end."

—CATHERINE PORTMAN

I HAD HARDLY left the boat from my native Ireland when I met the man who was to become my husband. He was devoted to his family and to his trade, which were closely connected: all his relatives worked together running a small, long-established hotel. I was afraid that his mother and brothers might resent my intrusion into this close-knit arrangement, but on our wedding day, as we passed their hotel on our way to the church, I saw this reassuring sign on the door: CLOSED FOR THE DAY DUE TO HAPPINESS IN THE FAMILY. —PATRICIA BRUGGER

IN ONE of the upstairs chambers of a stately Normandy château, a group of tourists was clustered around the guide as he made the astonishing statement that Louis XIV and Joan of Arc had spent the night there.

As eyebrows rose, he added, "In their respective centuries, of course."

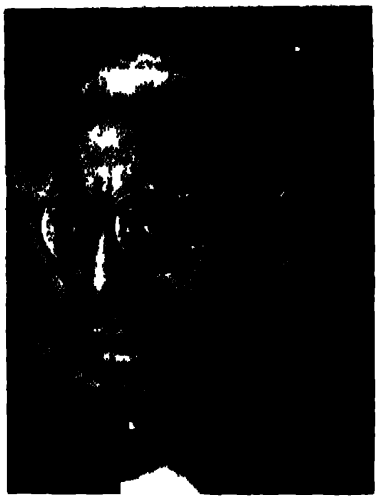
— G. MOORE

AS WE live in the country where we have to do rough outside chores, I frequently wear blue jeans. Perhaps *too* frequently, I decided the other day when my husband was watching me assemble a cardboard dress form and adjust it to my own measurements. Wistfully, he remarked, "It's going to be nice having a woman about the house." —LORIS TROUP

IN MEXICO CITY'S traffic it's a case of who can outbluff whom, especially in trying to cut across the city's main boulevard, the Paseo de la Reforma. We clung to our seats as our driver engineered several hairbreadth manoeuvres. Then a taxi came blindly towards us, heading for the same lane as ourselves. With a great screeching of tyres, we beat him to it.

"That fellow had a lot of nerve!" my wife cried.

"Not enough, *señora*," our driver intoned. "Not enough."—E. F. METZGAR



Haiti's Voodoo Tyrant

Murder, torture, the black-magic rituals of voodoo—these are among the administrative techniques of François Duvalier, the poker-faced doctor who runs his country like a megalomaniac

By Leland Stowe

At 7.25 a.m. last April 26, staccato bursts of submachine-gun fire shattered the tropical languor of Port-au-Prince, capital of the Republic of Haiti. Four guards who had just escorted President François Duvalier's two younger children to school were killed. The assault, apparently a kidnapping attempt and a death warning to the nation's detested dictator, plunged Haiti into a bloodbath.

Within minutes, barricades were thrown round the President's palace. Then his private militia and his secret-police thug squads, known as *Tonton Macoute* (Creole for bogeyman), launched a campaign of uncurbed slaughter and wholesale arrests. In one district after another, bursts of gunfire dyed the pavements with blood; bullet-riddled bodies lay where they fell, sometimes untouched for hours. That Friday night a doctor counted 65 corpses in a single hospital. In the regime's notorious jails and

torture chambers, mass executions of political prisoners added to the ghastly toll.

Duvalier kept exploiting the "kidnapping attempt" as an excuse to liquidate all remnants of opposition. By Sunday more than 100 Haitians, including many army officers, had taken refuge in foreign embassies.

During their ruthless manhunt, Duvalier's militia invaded and searched the Dominican Embassy—a flagrant violation of diplomatic immunity. The Dominican Republic—which shares with Haiti this Caribbean island—bristled. It issued an ultimatum, mobilized troops along Haiti's border. War seemed imminent. Offshore hovered the U.S. aircraft carrier *Boxer* with 2,000 Marines aboard, alerted for trouble. In Port-au-Prince, Duvalier held open plane reservations for a possible getaway of himself, his wife and four children.

The threat of war was finally averted, chiefly through Washington's counsels of restraint in the Dominican capital and through missions dispatched to the scene by the Organization of American States. But the price of peace was high—the survival of the Western Hemisphere's most demonic dictator. The horrors of Bloody Friday, coming on top of his six-year record of torture and assassination, served as grim warning. Duvalier's term of office was to expire on May 15, but he had previously rigged an extension of his presidency and now not a hand or voice was raised in protest.

"Papa Doc" (as Duvalier likes to be called) is a tombstone-faced man whose hooded eyes stare through horn-rimmed glasses, expressionless as a crocodile's. He tops his invariably funereal attire with a black Homburg and maintains a deep-freeze facial control. When extending a spongy palm to diplomats, he frequently scorns to utter a word.

His forbidding inscrutability reminds his people that this is a master to be feared. A lifelong student of voodoo, Dr. Duvalier is an acknowledged authority on its mumbo-jumbo sorceries—and also by some reports a practitioner, a great *houngan* (priest). Back-country natives, convinced he has supernatural powers, call him "Papa Guédé," the name of a voodoo divinity evoked on the Day of the Dead. This reputation helps him to keep the acutely superstitious Haitians in quaking subservience.

Haiti is a calamitously overpopulated country. Its people number some four million, 95 per cent of them of pure African descent; their language is Creole, a French *patois*. Ninety per cent are illiterate and ill-fed, subsisting in shocking destitution on Latin America's lowest *per-capita* annual income—about Rs. 300.

The ruler of this nightmare world was born shanty-poor in Port-au-Prince in 1907. He graduated from the local School of Medicine in 1934, and was recruited into a fight

against yaws, the tropical skin disease. In those years spent among the tatterdemalion dispossessed in the hinterlands of Haiti, Duvalier earned the reputation of a hard-working doctor. He was this, and more. At night he often slipped away to observe and take part in weird, blood-letting voodoo ceremonies. He cultivated friendships with powerful regional *houngans*. For besides a scholarly interest in his country's folklore, "Papa Doc" had ambitions. "When I become president," he told the *houngans*, "voodooism will have a central place in our country's heart."

He was appointed public-health director in 1946, and later Secretary of Labour. But following the 1950 *coup* which installed General Paul Magloire as president, Duvalier suffered political eclipse. To avoid arrest, he went underground for two years, spending the time with a schoolteacher friend, Clement Barbot, plotting the future domination of Haiti.

When elections were set for 1957, the voodoo doctor announced his candidacy for president. Proclaiming an undiluted "Africanism"—he advocated the removal of all mulattoes from public office—and backed by vital army support, Duvalier swept triumphantly into office. He promptly named Barbot his No. 2 man and soon had him recruiting criminal riff-raff into the *Tonton Macoute*.

Upon assuming power, Duvalier struck like a blood-scenting shark, and launched a long-prepared, relentless extermination of opponents and critics. Within two weeks, more than 100 people were jailed without warrants. In his first year, the *Tonton Macoute* murdered dozens. (Barbot later said Duvalier ordered him "to kill 300 a year.") He suppressed all labour and student organizations, stacked the courts with his own judges, expelled priests and prelates who would not glorify his regime.



His presidential rivals saved their lives only by fleeing. Unable to find former candidate Clement

Jumelle, *Tonton* executioners tracked down two of his brothers and machine-gunned them into ribbons as they surrendered, arms aloft.

With the same implacable vindictiveness the new president attacked every independent newspaper. Within a year, editors, directors or publishers of seven leading publications were jailed, most of them tortured. Mme Yvonne Hakine Rimpel, director of the anti-regime fortnightly *L'Escale,* was beaten unconscious before her screaming children by a dozen armed and masked *Tontons*. Then they transported her to an outlying district, raped and tortured her, and left her dying in pools of blood. Today, the few surviving journals print only paeans to the president's "imperishable genius" and "noble ideas."

"I don't think my police are more brutal than any others," Duvalier has said in answer to Western journalists' questions. But witnesses testify otherwise. Herbert Morrison, formerly Duvalier's public-relations adviser, has described the torture chamber in the presidential palace. One of the devices is a coffin-shaped "man-squeezer," the interior thickly spiked with stiletto blades. General Pierre Merceron told of a 17-year-old youth whom he tried to save from this chamber of horrors. Arriving too late, Merceron found the dying body such a ghastly pulp that he vomited. For this display of weakness Duvalier called Merceron too cowardly for the army and sent him to France as ambassador.

"Duvalier's entire rule is a revenge against all who were more fortunate than he in ability, wealth or success," says one exiled leader. The dictator's actions seem to bear this out. Invariably he keeps dignitaries waiting. He sacks cabinet ministers without notice or explanation; but not one dares to refuse appointment or to resign—those who have tried it have disappeared. At cabinet meetings, where he places his revolver on the table, the "Renovator of the Nation" (as he recently had himself proclaimed) often scans a newspaper while a secretary reads to the members the decisions they have "unanimously approved." Then he may wave his ministers out without deigning to open his mouth.

A prominent Haitian voices the widely-shared opinion: "Duvalier is a madman, like Caligula"—a verdict eventually expressed by chief terrorist Barbot himself. (In February 1960, Barbot instigated an assassination attempt against the president and was thrown into jail. Released after 18 months, he went into hiding. Last July 15, Duvalier's militia shot him down with his brother a few miles north of the capital.)

If "Papa Doc" has delusions of grandeur, he knows how to turn them into real cash. Soon after taking office he paid visits to several Port-au-Prince banks, where his

armed escorts scooped most of the contents out of the vaults. About Rs. 1·5 crores in taxes from tobacco, matches and other government monopolies are diverted annually into non-budgeted "presidential funds." Armed bogeymen collect up to Rs. 1,500 monthly from business enterprises as "voluntary contributions" to his Committee for National Economic Liberation. Taxes are punitive: even market women and street venders are obliged to hand over a quarter of daily earnings averaging a mere Rs. 3.

Duvalier seems to take particular satisfaction in using U.S. dollars for his own nefarious purposes. The United States has bestowed more than 42·5 million dollars in aid on his regime, and some of this has gone to build up the dictator's terrorists.

In 1960, after a Duvalier-publicized "Cuban invasion attempt," Washington dispatched military aid to help strengthen the Haitian army. Duvalier turned this to his own use. Early in 1962, Americans discovered that the bulk of their nearly two million dollars in military aid had ended up in the hands of Duvalier's private uniformed militia. (This force now numbers 10,000, the *Tonton* Gestapo another 5,000, the Haitian Army only 5,000.)

Prominent Haitians hold misguided U.S. policies chiefly responsible for Duvalier's consolidation of power. Joint protests by the leaders of several Latin-American countries are credited with bringing about a U.S. policy reversal in 1962. Duvalier is now clearly regarded by Washington as a sinister influence.

Despite almost unanimous international disapproval, the wily dictator is determined to hold power. Last August a small force of exiles under General Leon Cantave landed in Haiti and entrenched themselves in the mountainous region to wage guerrilla war against the government. Routed by superior force, they fled across the Dominican border in late September.

"Whoever overthrows Duvalier will need much power—and need to know how to use it," remarks a long-time foreign resident. An exile leader adds: "Duvalier will leave a powder magazine with fuses lighted at both ends—with the real danger of Communism in Haiti."

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Working to Rule

WHILE my mother believes in the Golden Rule, she also advocates a second maxim, which she terms her Iron Rule: "Don't do for others what they wouldn't take the trouble to do for themselves."

—Contributed by Mrs. D. Fulton

Do we expect too much of these mechanical geniuses? After all, they're only human

Computers Confounded!



"I'm afraid it needs a psychiatrist"

By S. David Pursglove and John Ennis

If you envisage a world regulated by the calm clicking of an infallible computer and therefore free from error, you are in for a disappointment. The electronic brains—there is one at Newcastle-upon-Tyne owned by Britain's Ministry of Pensions which already has 26 million Britons reduced to magnetic tape—are showing signs of nervousness, intoxication and indecision. Many are running amok.

There have been mentally unbalanced robots at the Burden Neurological Institute in Bristol, England, and at the Massachusetts Institute of Technology in the United States. From time to time these thinking machines go completely crazy. The robots were designed to hunger for heat or light to satisfy thermocouples or photocells.

They become intoxicated from

Adapted from an article in Popular Mechanics
Cartoon reproduced by permission of Punch

too much heat or light, become desperate when there is too little. They exhibit realistic frustration when routes to goal accomplishment are blocked. These machines can make a free choice between two equally feasible routes; but, when they are designed to be able to learn from experience, they break down in throes of agonizing indecision when given ambiguous instructions.

Several computers have had genuine nervous breakdowns. The classic story is about the machine who worked too hard at an impossible job. All night long she clicked and clacked wildly, and as dawn approached she was whirring angrily and gnashing her gear teeth in frustration. Finally she blew her tubes and fuses and collapsed. She had been trying to divide by zero.

Machines even succumb to romance. William Dersch, of International Business Machines, designed a computer with ears. She responds to carefully spoken numbers with a regulated "clack-click." But one day she became enamoured of a movie-camera spring that was being wound within her hearing and went into a rhapsodic hysteria of clickety-clacks.

Another sensitive machine is ERNIE—the British G.P.O.'s Electronic Random Number Indicating Equipment at Lytham St. Annes, Lancashire—which picks the winners of the monthly Premium Bond lottery. One day, as a celebrity was about to perform ERNIE's monthly switching-on ceremony, bagpipes began playing in the street outside. ERNIE showed every sign of switching himself on, and engineers leaped forward in alarm. Apparently the music of the pipes struck some chord in the valve where ERNIE's heart should be. Unkind Sassenachs have other explanations.

The most advanced computers still place pathetic reliance on flesh and blood people. Scientists using a computer at Birkbeck College, London, to translate between German and English, have to make special checks whenever it handles a word which might be part of an idiomatic phrase. "Otherwise," one scientist explained, "the English phrase 'out of sight, out of mind' could easily become the German for 'blind lunatic.'"

An electronic machine that stood guard in an unattended North London electricity sub-station did not know that dialling O will no longer raise the telephone operator. One Saturday the machine took automatic notice of a fault and sent out ten running pulses, which is the equivalent of dialling O. When an electronic response confirmed that its call had been answered at the telephone exchange, it started up a loop tape which repeated, "A fault has developed. Please dial the duty engineer at ——." No human heard the cry for help. Instead, a similar loop tape in the exchange replied, "Dialling O has been discontinued To reach the operator you must

now dial 100." The two machines kept up this conversation until an engineer came to their rescue some hours later.

It is true that humans often feed the machines the wrong information or ask them to do the wrong things, but the machines themselves are not infallible. A big computer can be expected to make a mistake at least once a week. Mistakes stem from such things as failed transistors, loose connexions, foreign matter in the machine or overheating. There was near chaos at Rosyth dockyard, Scotland, a few years ago when computers employed in preparing wages for 5,400 workers broke down. Penniless workers had to be given railway travel vouchers to get home.

In theory, robot mistakes can be prevented by using two robots, one to check on the other and eliminate errors. This doesn't always work.

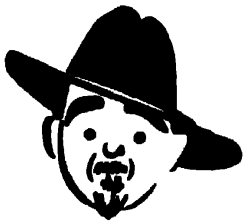
A robot and robot-checker were assigned to keep U.S. Army supplies flowing. A supply officer approached the robot one day and suggested that 300 footlockers be ordered for a unit in Europe. The machine's operator—admittedly a human—mistakenly punched a card for 30,000 and fed it to the machine. The robot shrugged its tape reels and ordered 30,000 footlockers without question. The order went to the robot checker, and the warning signal went up. The machine knew the order would deplete the home supply of footlockers. So it clacked out an order to army supply officers to purchase 30,000 footlockers to replenish the stocks.

The army has its automated problems, but it is the civilian population that is fighting back. An almost fully mechanized post office in America has become the butt of jokes because it cannot tell the difference between a postage stamp and a "Merry Christmas" seal.

In Britain in 1962, Norfolk County Councillors were told by the Ministry of Housing and Local Government not to count on receiving the £50 million which was listed as the amount due as the county's general grant from the Government. The true figure was about £4 million, but the Ministry's new computer was having teething troubles. The Housing Minister, Sir Keith Joseph, later told Parliament, "I gather that during one of the trial runs the Scilly Isles were discovered to be within the London Metropolitan Police District."

There is, in fact, still hope for us obsolescent mortals. Six years ago a marine-engine manufacturer decided to switch to a fully automated assembly line. But no matter how the robots were arranged, one job was not being done. The scrap metal from a die-casting machine was not being removed. After weeks of checking all kinds of robots and talking to people who had run into the same problem, the company's chief engineer recommended: "Hire a man with a wheelbarrow."

Personal Glimpses



DAVID LOW, the world-famous British political cartoonist who died last year, once told an interviewer: "If you are ever asked to write my epitaph, you can say, 'Here Lies a Nuisance Who Was Dedicated to Sanity.' " —*NYT*

GEORGES BRAQUE once said, "When I begin a painting, it seems to me that everything is on the other side, simply covered with this white dust, the canvas. All I have to do is dust. I have one little brush to bring out the blue, another for the green or the yellow—my paint brushes. When everything is clean, the painting is finished." —Michael Gall

FILM DIRECTOR Cecil B. DeMille once commented that he was not a university graduate. "I've been accused of not being able to read, but no one has ever said that I can't add."

To prove his point he described how in the old days they poured chemicals from the film-developing room down a gutter that ran to a near-by sewer. "The city told us to dispose of the solutions in some other way. A kindly old soul came along and offered to haul away the hypo for 25 cents a tank. I did a little figuring and found he couldn't make expenses that way. I'm a great believer in human kindness, but I never heard of anyone doing anything for nothing; so I refused his offer and waited to see what would happen. A few days later he came back and offered to do it for nothing. Then he said he would *pay* me 25 cents a tank. I eventually told him I would not sell the stuff at all but would go 50-50 with him if he let me in on his secret."

DeMille paused, opened a desk drawer and withdrew a glittering little ingot. "I've kept it all these years as a reminder to be careful when someone wants to buy something from me. It's solid silver. This man had discovered that the silver in the hypo could be reclaimed. I learned his secret, and it paid most of our chemical bills for quite a while."

—Phil Koury, *Yes, Mr. DeMille*

PIANIST Artur Rubinstein once said, "I always recommend that all musicians have daughters. Sons are inclined to smile tolerantly and say, 'Papa is a fine fellow but a little mad, of course.' But daughters understand and adore! They know instinctively that an artist remains something of a child to the end of his days." —*Wisdom*

WHEN the Archbishop of Canterbury was in New York, a photographer, trying to get his attention for a picture, couldn't think how to address him. In desperation he called, "Archie, would you turn your head this way, please?"

His Grace turned his head and, affable as ever, said, "My name, sir, is not Archie. It's Mike." —*The Witness*

France Comes of Nuclear Age

An explanation of what lies behind de Gaulle's bid for power

By Robert Kleiman

President de Gaulle's small nuclear strike force — long debated, disputed and even ridiculed by the world—is now becoming a reality. Its delivery vehicle, the Mach-2·2 Mirage IV bomber, is coming off a Bordeaux assembly line at the rate of one month; output reaches two a month this year. Production of atomic bombs, after numerous Sahara tests, is more than keeping pace. The bombs are of 60 kilotons, larger than the Hiroshima bomb, though small compared to the current thermonuclear monsters.



The Mirage IV jet bomber

The first six- or eight-plane units will soon be fully operational. Crews, two per plane, are training for what will be a 50-bomber

force by the end of next year.

A *Commandement Aérien Stratégique* (Strategic Air Command) has been set up in Versailles under Major-General Bernard Marie. An underground command centre is being built at Taverny, in the north-west outskirts of Paris, with crisis quarters for de Gaulle himself.

Tactics are ready, worked out on three Mirage IV pre-production planes.

Inertial navigation, bombing techniques and methods of minimizing ground vulnerability have been tested. The light, twin-jet Mirage IV can take off from 2,000-yard fields, hardened by a new chemical spray. The Mirage IV's will be dispersed to secret strips all over France.

Their main bases and supplies will be scattered on dozens of military airfields, where the planes will be housed in individual air-conditioned concrete hangar-bomb-shelters at the end of their runways, safe from anything but a direct nuclear hit.

On four-minute alert, the stand-by Mirage IV's will be airborne 60 seconds after racing out of their hangar doors. French airmen are convinced that a substantial percentage would be able to get through Soviet defences at high altitudes in the 1964–66 period. It is hoped that, at a later stage, an air-to-ground missile that can be fired at a considerable distance from the target would permit low-level "stand-off" attacks, far more difficult to intercept.

Meanwhile, research and development are under way for an invulnerable "second-generation" nuclear force for the 1970's. It is to consist of three to five nuclear submarines, each carrying 16 medium-range missiles tipped with hydrogen warheads. A 5,000 million N.F. (Rs. 500 crores) gaseous-diffusion plant, to produce enriched uranium for the H-bomb, is under construction at Pierrelatte in southern France. French islands in the South Pacific are being made ready for construction of an H-bomb test site. A prototype of a nuclear submarine engine is being built. Advanced solid-fuel rockets are being tested.

De Gaulle's nuclear effort is costing France thousands of millions, and already straining the nation's resources. But there is no longer any doubt that France can build a small independent deterrent. President Kennedy admitted as much last August when he recognized France as a nuclear power, qualified, under certain conditions, to receive the kind of aid Britain had long obtained under the Atomic Energy Act.

Yet, only a year before, U.S. Defence Secretary Robert McNamara denounced small independent nuclear forces as useless and dangerous. And the whole enterprise remains as controversial as ever.

The French nuclear force is usually considered to be de Gaulle's

creation. The French President has certainly pushed it; without his determination, it might not exist today. But most of the basic decisions were actually made before de Gaulle returned to power in June 1958.

The real father of the *force de frappe* is General Pierre Gallois, a 52-year-old Air Force general, little-known outside France, who helped to think up the original idea, then, almost singlehandedly, over widespread military and civilian opposition, persuaded the French Government to undertake it.

General Gallois flew on 30 night raids over Germany with RAF Bomber Command in the war, and spent his days writing articles on military strategy for a Free French magazine in London. A brilliant military intellectual, Gallois later benefited from a key post in the North Atlantic Treaty Organization command by educating himself in nuclear weaponry. Now retired, Gallois was selected in 1953 by General Norstad, then deputy supreme NATO commander for air, to join in an allied study of how nuclear weapons could be used to defend Europe. With four other British, American and French officers, Gallois spent a year drafting a 1,000-page document which profoundly influenced all NATO's subsequent war plans.

In July 1954, Gallois was summoned to a conference with the French Secretary of State for Air, Diomède Catroux, to discuss the modernization of the French armed forces. Gallois' view was that the atom bomb would serve as the "equalizer" between the big and the small. He argued that France should build its own nuclear force and that the capability of destroying even 20 Soviet cities would deter Soviet aggression.

During the next three years, Gallois briefed cabinet ministers, deputies, senators, businessmen, editors and military men. He encountered so much scepticism that he began to illustrate his theses on huge cardboard charts which, as a skilled artist (his handsome Paris apartment is covered with his own murals), he himself prepared. In March 1956, Gallois was instrumental in convincing Socialist Premier Guy Mollet that, without nuclear weapons, national defence was inconceivable. As a result, Mollet ordered the development of a French atom bomb and launched the construction of the Mirage IV prototypes.

Thus, by the beginning of 1957, research was well along on the plutonium bomb and initial funds were budgeted for the Pierrelatte gaseous-diffusion plant, which would make possible the development of a hydrogen bomb. After de Gaulle took office in June 1958, vastly larger sums were budgeted, and the whole programme was accelerated.

When it is completed, France

will have a nuclear force of limited military value—less than one per cent of the striking power of the U.S. nuclear establishment. But the real issue does not lie in military effectiveness. The real issue is political.

What de Gaulle primarily expects to get for the millions he is spending is a status symbol. For him, as for Britain, an independent deterrent has become the necessary attribute of a major power in a world dominated by two colossi. This, from the beginning, has been the central issue in the six-year nuclear dispute that has troubled French relations with the United States and NATO.

Long before he exploded his first atomic device, de Gaulle pressed Eisenhower to recognize France as a world power. He refused to permit U.S. intermediate-range missiles or atomic stockpiles on French soil, forcing the withdrawal of U.S. fighter-bombers from France. He pulled his Mediterranean fleet out of NATO and has now announced that he will do the same with his Atlantic fleet.

His price for co-operation, he told Eisenhower four years ago, was a veto over America's use of modern weapons anywhere in the world.

"Do you mean," Eisenhower asked unbelievingly, "that if I want to use rocket missiles over Formosa Strait, I have to ask your agreement?"

The unabashed answer was "*Oui,*" and Eisenhower concluded it was impossible to come to terms with de Gaulle.

But de Gaulle's campaign was catching. Germany, followed by other NATO countries, sought a greater voice in NATO's U.S.-controlled nuclear strategy. Britain, starting to withdraw from the nuclear race, decided instead to hold on to her own deterrent. The United States was forced to offer Europeans a nuclear role in a multilateral force of 25 Polaris-equipped ships.

French and British officials have recently argued the case for an Anglo-French deterrent. Continental countries have begun to call for a European deterrent without an American veto. In a word, the genie is out of the bottle, and the Moscow test-ban agreement cannot put it back.

Kennedy recognized this. He tried to satisfy the non-nuclear powers with his multilateral force. He extended the life of Britain's deterrent far into the 1970's with the Polaris deal. And he offered to talk with France about nuclear aid in return for fuller co-operation in joint defence of the West. But de Gaulle showed little interest. He wanted to avoid a meeting until his first Mirage IV squadron was fully operational. He wants the United States to treat him as an equal in shaping the West's nuclear strategy and in negotiating with Russia over European issues. Nuclear assistance, for which he personally

has never asked directly (although his ministers and generals have), is secondary to his overriding objective: great-power status for France.

Will de Gaulle be more amenable once his *force de frappe* is flying? There is a theory that de Gaulle is most intransigent when he is weak. During the war, Churchill once urged the French leader to yield to Roosevelt as he, Churchill, had done many times.

De Gaulle replied, "You are seated on a solid state, an assembled nation, a united Empire, large armies. But I! Where are my resources? I am too poor to be able to bow."

A few Mirage IV bombers equipped with 60-kiloton atomic bombs will not make de Gaulle rich in nuclear power. But there are some who feel it will represent for him a symbol of nationhood, of bigpowerdom. In this sense, France is about to come of age in the nuclear era. But it is by no means clear whether this will make de Gaulle a more co-operative ally.

The French President wants to speak for Europe. But his efforts to unite the Continent, so far, have been hampered by his determination to dominate in its leadership. De Gaulle has sought, first of all, to shape Europe into a loose, nineteenth-century coalition of states, led by France. By building a national instead of a European nuclear force, by opposing federal union on the Continent, by withdrawing co-operation from NATO, by excluding Britain from the Common Market and by abstaining from U.S.-British negotiations with Russia, de Gaulle has achieved the progressive isolation of France instead of advancing the burgeoning union of Europe.

Whatever the virtues of the French President, and they are many, America is unlikely to accord an equal voice to a nation of 47 million with an economy one-ninth that of the United States and a nuclear force that, at its maximum, will amount to less than one per cent of SAC.

The United States, on the other hand, has offered "equal partnership" to a united Europe. A federal union, based on the existing Common Market, would make Europe into the world's Third Giant. That Europe, even without Britain, would have a population of 170 million, an economy as strong as Russia's and the capability of becoming a major nuclear power. With Britain, it would be far stronger.

Such a union could not be achieved overnight. But if de Gaulle were to move effectively to unite the Continent, he would need no other status symbol to strengthen his political voice.

AN ANTARCTIC research team at McMurdo Sound refers to pinups as "Memory Aids." —A. J



SPECIAL REQUEST FEATURE

The Right Hon. Kenneth Younger, Chairman of the Howard League for Penal Reform, has asked that this article be reprinted. It first appeared in The Reader's Digest for November 1948

Elizabeth Fry Goes to Newgate

By Janet Whitney

"One man or woman raises a banner and thousands follow; little movements, started locally, become worldwide." This was never more true than of the movement on behalf of women prisoners initiated in the early nineteenth century by Elizabeth Fry, the Quaker wife of a prosperous London merchant, whose success at Newgate Prison is described in this article. Later she visited prisons throughout the British Isles, France, Germany, Belgium, Holland and Switzerland, devoting a quarter of a century to the work, effecting many improvements, and becoming the chief exponent of prison reform in all Europe.

On a cold January day in 1817, in the gloomy vestibule outside the women's yard at Newgate Prison, two turnkeys were arguing with a lady. The row inside the yard was as great as usual. Even while they talked, a woman rushed wildly out of a doorway and, with shrieks of

Condensed from The Atlantic Monthly

furious laughter, snatched off the head-gear of every woman that she could reach.

"And she wouldn't stop at doing that to you, ma'am. Tear off your things—scratch and claw you—that's what they'd do, ma'am." The turnkeys themselves knew better than to go in alone. But the lady was obstinate. She smiled and said, "Thank you, but I am going in—and alone." At least, then, she must leave her watch behind. They could see the glittering chain on the quiet richness of her Quaker dress. But the unreasonable lady would not even do that.

Reluctantly the turnkeys pressed open the gate against the begging, scuffling crowd, and Elizabeth Fry went in. The gate clanged and locked behind her. There was an instantaneous silence of complete astonishment. Then every woman in the yard surged forward. The lady was surrounded; the turnkeys could see only the tip of her white cap. But no one was snatching. The Quaker dress was not provocative. Yet Elizabeth was in great danger. If she should now show fear, or say or do the wrong thing . . . but she had never been less afraid in her life. She picked up a filthy little child and it could be seen fingering her bright chain. Then she lifted her hand for attention.

"Friends, many of you are mothers. I too am a mother. I am distressed for your children. Is there not something we can do for these innocent little ones? Do you want them to grow up to become real prisoners themselves? Are they to learn to be thieves and worse?"

Thus she pierced their armour. They gave her a chair and brought their children to her. What tales she heard of wickedness, remorse, injustice, and despair! She remained with them for hours, and made plans with them. And when at last she bade them farewell, she left behind her an inhabitant very strange at Newgate—revivifying Hope.

What, then, was Elizabeth Fry's remarkable project? It was nothing more nor less than to start a school, in Newgate, for the children of prisoners and for juvenile criminals. By invoking the aid of the women themselves, she put herself more than a hundred years ahead of the most advanced thinkers of her time.

On her next visit Mrs. Fry was welcomed as an already familiar friend. Remnants of lost manners returned to the women in response to her serene courtesy. They proudly presented to her the schoolmistress they had chosen from among themselves, a young woman named Mary Connor, recently committed for stealing a watch, but in other respects well qualified to instruct the young.

Mrs. Fry praised their progress, and talked over with them in detail rules for the school. Assured of their complete co-operation, she then approached the authorities—the two Sheriffs of London, the Governor



of Newgate himself. Only a lady of wealth and standing could have commanded the ear of these important men. As it was, they gave her every attention, but displayed the usual official attitude. Her plan was a very nice plan and it did her heart and mind credit, but, alas! Mrs. Fry did not know Newgate as they did. These women were incorrigible, irretrievable. Besides—this was at the second interview—there was not a single room that could be spared.

Astutely Mrs. Fry committed them to the statement that the absence of a room was now their only objection. She then went to her allies, the women prisoners. To state her problem to them was to solve it. One small room was found to be, by common consent, unneeded for any other purpose. Then the Sheriffs gave their permission: she might try her "benevolent, but almost hopeless, experiment."

The very next day, Mrs. Fry, as impatient to begin as the prisoners themselves, brought old schoolbooks, installed Mary Connor as teacher, and formally opened the school. Thirty pupils, mostly children of seven and under, were enrolled; the "narrowness of the room" would hold no more. But the door was besieged with girls in their teens and women in their twenties and older, imploring, with tears, to be taught.

Elizabeth promised she would try

to do something for them, if they would be patient. Daily she passed through the appalling life of the yard. She saw and heard and was aware of all kinds of filth, drunkenness and degradation. She knew that men prisoners were let into the women's quarters at night. She knew of abuses "too bad to tell," so that she never dared take any "young person" into the place. Yet she neither despised nor despaired. She perceived that the enforced idleness, the dreadful ennui of prison, was itself a direct incentive to vicious behaviour.

The more intelligent prisoners had told her the very first day that they wanted to be taught to read and sew. A third of the 70 women at Newgate were unable to read at all; another third could read "only a little."

As for sewing, it would enable the women to make clothes for themselves and their children. And after that, what? Elizabeth concluded that they should sew things to sell. But to whom? And where was the money for materials to come from?

She consulted others interested in prison reform. All threw cold water on her ideas. The materials given out to prisoners would be stolen. The women would soon tire of it. Most of them were the very scum of the city, prostitutes and thieves from their youth up, and any desire for betterment or novelty would be temporary. She would only waste her time and money, and get her feelings hurt, besides.

None the less she persevered. She got together ten of her friends, all but one Quakers like herself, and they formed the Ladies' Newgate Committee. They bound themselves to take turns in going daily to Newgate to instruct the women, to provide funds for materials, to arrange for the sale of the work, and to pay the salary of a matron to be on the spot day and night.

At this point, Elizabeth Fry's husband came to her rescue. He knew that beneath the stately air of the handsome matron of 37, there beat a heart still subject to girlish tremors, and that she dreaded making another appeal to the Governor and the Sheriffs. So he invited them to meet his wife in the wealthy atmosphere of his own home and under the dignity of his protection. They came, they argued, they discouraged—and they consented. They had, in fact, handicapped themselves by the admission of the school for the children. That indeed had been the thin end of the wedge which, driven now farther in, was to split the rotten timbers of prison administration clean asunder.

The Governor had the prison laundry cleaned, whitewashed, and fitted up as a workroom. There Elizabeth started what she still called a "School." Monitors from among the prisoners themselves were placed over every 12 women, but not a monitor was appointed, or

a rule made, without unanimous consent. Later Elizabeth Fry instituted a system of rewards for good behaviour, but never any punishments, other than the losing of the rewards.

Within a month of the start of the experiment, the Lord Mayor of London, the Sheriffs, and several of the Aldermen came down to Newgate. "Many of those," says one commentator, "knew Newgate, had visited it a few months before. They now saw what, without exaggeration, may be called a transformation. They saw no more an assemblage of abandoned and shameless creatures, half naked and half drunk. This 'hell on earth' exhibited the appearance of an industrious manufactory or a well-regulated family. The magistrates immediately adopted the whole plan as a part of the system at Newgate, undertook part of the expense of the matron."

Thus began a work that within a year was to grow to a dimension which would carry Elizabeth Fry's name all over the country, within three years was to place her in correspondence, as prison adviser, with most of the crowned heads of Europe, and which since her death has given her a niche among the great women of history.

Parental Strategy

At 18 Mary began to stay out at parties later than her parents thought advisable. They would sit up until she came in, and when they remonstrated over the lateness of the hour, she complained that they treated her like a baby.

Her parents hit upon a solution. They all agreed beforehand on the homecoming hour, usually a compromise between Mary's ideas and theirs, and set an alarm clock for that time. It was up to Mary to be home in time to "unset" the alarm. Her parents could retire when they felt like it, and did not need to worry about her unless the bell woke them.

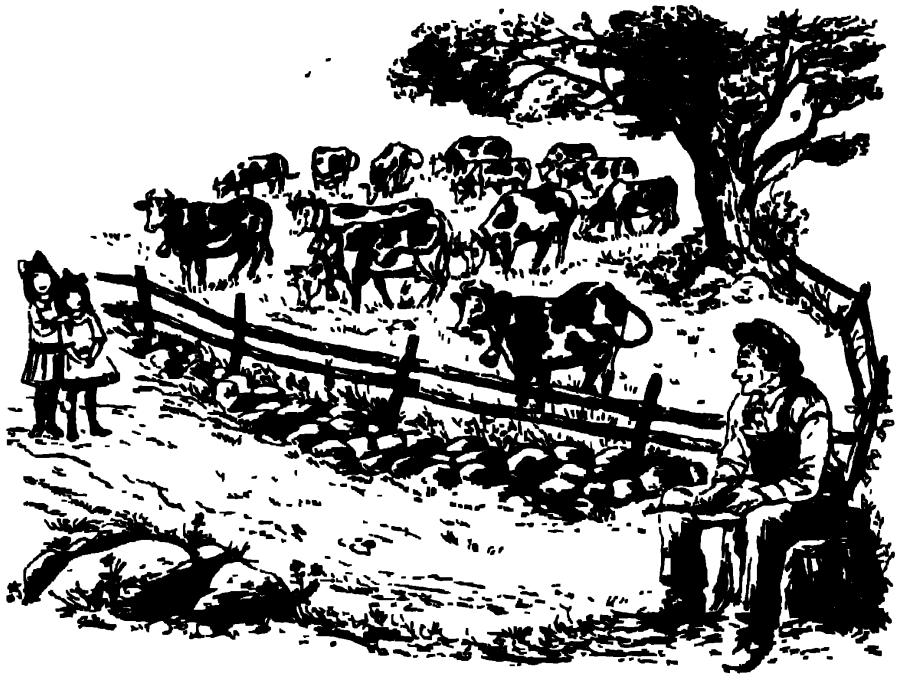
—*The Parents' Magazine*

Ssh!

We were watching the 18th-hole finish of a golf tournament on television. Arnold Palmer was about to take his stance, and the commentator's voice became hushed as he described the dramatic situation. I asked my friend, an avid golfer, to turn up the volume. "I can't," she whispered, "not while he's putting."

—L. K. H.

A Reader's Digest "First Person" Award



THE DAY THE COWS DIDN'T COME HOME

How do you turn discord into harmony? It takes a keen ear, a delicate touch—and a heart as understanding as Mr. Dunnegan's

By Jean Bell Mosley

FOR A SHORT while the Dunnegans were our closest neighbours. They moved on to the old Barton farm, which was thin-soiled, rock-ribbed and slant-sided, so no one was surprised when they stayed only a single season. But they were long-remembered, especially Mr. Dunnegan. Years later, when his name was brought up, a certain look, almost of bafflement, would come into people's eyes. Someone would say, "You know, that cowbell man who . . ." The sentence was seldom finished, because nobody could think of words to express

exactly what it was the cowbell man had done.

Mr. Dunnegan was a tall, spare man, with a sun-browned face wrinkled in pleasing patterns as if he'd laughed a lot. His hair was white and bushy and sometimes, in the right light, the circular fringe of it that stuck out from beneath his ancient straw hat appeared to be a sort of feathery halo. He walked a little bent forward as if eager to meet life on its own terms and do what he could with it. If a problem was discussed in his presence his inevitable query was a soft, "Is anything being done about it?" as if he needed to know before proceeding with ideas of his own.

Things weren't going well in our community when the Dunnegans arrived. Jim Harris's baying foxhounds had run through Britts' barnyard when their best cow was giving birth. The cow had panicked, lost her calf, and now the Harrises and Britts weren't speaking. The Alexanders, for some petty reason, had put up a wire fence across a path the schoolchildren had been using for years. Mrs. Collins had improvised on Mrs. Stacy's original jellycake recipe and won first prize at the local show while Mrs. Stacy came third. The McClanahans filled up one small pothole, letting the burden of the local road upkeep fall on the other men. "Everyone's nerves are like rawleather bootlaces left out in the rain," Mama deplored.

Then Mr. Dunnegan dropped by our house to tell us he was our new neighbour. He had been working in a foundry recently, he told us. Foundry work was too much inside, so he was of a notion to get back to corn and beans.

"I noticed all the folk here let their cows range in the hills," he said. "Wondered if it would be all right to let my cow range with them?"

"Sure," Dad told him. "That is if you don't mind how far you might have to go fetch her, come milking time."

"I'd be glad to take my turn going after them," he offered.

"Right now, everyone goes after his own," Dad said, looking a little embarrassed.

Mr. Dunnegan's brow wrinkled upward. "Seems like a lot of wasted effort," he said. "Neighbours out of tune?"

Dad elaborated about the dogs, cows, fences and road work.

"Anything being done about it?" Mr. Dunnegan wanted to know.

Dad looked a bit surprised. "Why, nothing we know of, except everyone minds his own business."

Before leaving, Mr. Dunnegan borrowed our axe, and later when he returned it, all shiny and nicely sharpened, he asked, "Is your belled cow the big Guernsey with the star on her forehead?"

Dad told him it was, whereupon Mr. Dunnegan explained that, on the side, he fiddled with bell tuning

and if we liked, in payment for the loan of the axe, he'd clean and tune our cowbell.

"A bell tuner!" Mama exclaimed after he had gone, voicing the wonderment and fascination we all felt. It was as if a chimney sweep or pearl diver had come to our hills to offer his services.

A few days later, my sister Lou and I went over to the Dunnegans to learn what we could of this strange thing called bell tuning. Mrs. Dunnegan, a little round-faced woman, took us out to her husband's shop.

We hardly recognized the bell he was working on as our old Star's. Mr. Dunnegan had sanded and polished it until its sides gleamed. Now he was filing round the lower edge of it, but he interrupted his work to make a seat for us on an old box. "See?" he said, ringing our bell and another smaller one at the same time as if to show wherein he was not finished.

The smaller bell had such a pretty sound—clear and silvery, like meadowlarks singing from a summer daisy field. Not just one sound either, but sound on top of sound, each fainter and fainter as if some Pied Piper, having reached the top of a mountain, were going down the far side.

"This little bell had a perfect A tone when cast," he said. "I can use it to tune others by."

Mr. Dunnegan scraped a little more on Star's bell, while we watched the filings settle to the floor. Then he rang the two together again, head cocked to one side, listening intently. "Better," he said, but still not satisfied. "Star's bell has a lower tone, close to middle C." His file made lighter and lighter strokes, and after each stroke he would ring the two bells at once. "Bells are like people," he said. "Few are born knowing how to harmonize. They have to be tuned."

At last, after one final rasp, so light that the file seemed hardly to touch the metal, Mr. Dunnegan rang the bells simultaneously, closed his eyes to listen more intensely and said, "Ahh," as one deeply satisfied.

The little bell's sweet joyous music seemed to accent the now pure, rich, mellow tones of Star's bell. Sort of like when Adelaide Britt and Murphy Alexander sang duets, I thought, only they hadn't sung any lately on account of their parents' quarrels.

"How do you tune people so they ring pretty together?" I asked, now that Mr. Dunnegan was finished.

He looked at me quickly as if I had asked a question beyond my years. "The ordinary daily shove and grind against each other takes care of a lot of it," he chuckled, then added more thoughtfully, "plus a few towering visions of what life could be."

By middle summer Lou and I knew that Mr. Dunnegan hadn't stopped with tuning just Star's bell. When he wasn't busy ploughing his

corn or hoeing his beans, he was either coming from or going to some of the neighbours with a cowbell slung over his shoulder making a tinkling sound as he walked. "Got to return this post-hole digger," he'd explain, or, "Going to borrow a sickle." We knew the tuned bell was his thanks for the borrowed item as it had been for our axe.

Most of that summer our cows had co-operated nicely by coming at least part of the way home on their own, but one evening we had to go far up the side of the mountain after them. Where the twisty path left the meadow Lou stopped suddenly and said, "Listen, I hear music." I heard it, too—soft, sweet and irresistibly beckoning. We started off in the direction of it as naturally as a sunflower turns to the sun.

Drawing closer, we soon realized that our music came from the mingled bells of the cows, although different from any sound the mingling had produced before. At last, parting some undergrowth, we looked out on to a little grassy clearing and saw them. There were Britts' old Bessy and Ginger; Stacys' Tina, Blackie and Sue; McClanahans' Belinda and Cherry; our Star, Stella and Trudy, and all the others, three dozen or more altogether. The lowering sun glinted on the many highly polished, perfectly tuned bells, making the little meadow sparkle as with musical fireflies, and the joyous sound seemed to be a thing we could reach out and touch.

There was no melody to the music, yet it seemed as if every bell was ringing at the exact proper time in relation to all the others. Sometimes only one would ring, doing a sort of solo, then all at once the whole chorus would chime in. Suddenly everything in the world seemed to be right and moving along according to some unheard, unseen, but harmonious pattern.

"Look at Britts' and Harrises' cows," Lou said softly. "They don't know their owners aren't speaking, do they?"

"Hallo there," someone called from not very far away.

Turning, we saw Mr. Dunnegan sitting on an old stump at the edge of the clearing. We hurried over to tell him how wonderful we thought the music was.

"Wish everybody could hear them together like this," Lou said. "Let's get the kids who come for the cows to stay, and maybe their parents will come looking for them, until we have nearly everyone."

"Older folk may not like it, having to come way up here after a hard's day work," Mr. Dunnegan said, but his broad grin and sparkling eyes denied the sincerity of his argument, and he didn't stop me when I went to drive some of the cows back that had started to stray towards the edge of the clearing as if to go home.

Little Teddy McClanahan was the first to arrive. There was a look of starry-eyed wonder in his eyes.

"What is it?" he wanted to know.

"Mr. Dunnegan has tuned all the bells," Lou explained. "Don't take your cows home yet, Teddy. Let's listen a while longer."

Soon the Britt, Collins and Alexander children came, all as utterly delighted as we were and quite willing to wait a while.

Then some of the older folk started arriving. "What's going on?" Mr. Britt demanded, cross at first, but in the deepening twilight we could see his face softening as he listened. Then came Jim Harris, Mr. Alexander, Mr. Stacy and Mr. McClanahan and others, all demanding to know why the cows were being held up, but soon pausing to listen.

Dew fell; up from the hollows came the odour of wild honeysuckle and an early star trembled into sight. For some reason, Adelaide Britt began to sing softly. Murphy Alexander joined in.

It was Mr. Dunnegan himself who broke the spell, saying, "Well, these creatures have to be milked." With that we all scrambled up and started for home, separating our cows only when we got to the bottom of the mountain and had to go our own ways. Britts' old Bessy and Ginger started following Jim Harris's cows. "Hey, Jim, head my cows back this way, will you?" Mr. Britt shouted.

All of us noticed, because it had been so long since they'd had anything to say to each other, and we turned as one to see if Jim would do it. It was a thing as light and delicate as one of Mr. Dunnegan's final rasps on a bell when Jim turned the cows and Mr. Britt yelled his thanks.

That autumn when we started back to school there was a gate in the fence that crossed the path. The roads got better, too. The McClanahans put in a whole week's work on them. Some of their cousins wanted to drive out from town and listen to the cowbells.

Before the winter set in, the Dunnegans moved away. The neighbours offered reasons. "That old Barton place just won't make anyone a proper living," or, "He was a moving-type man."

But Lou seemed to have the best answer. On cold winter nights when the clang of old Star's bell, as she turned in her stall, awoke us, I'd whisper to Lou, "Remember Mr. Dunnegan?"

"Sure."

"Why did he go away?"

"He was a tuner."

"But why did he go?"

"He had finished here."

Ill Repute

AN ELDERLY woman in a chemist's trying to remember the name of a medicine, said, "It's named after a type of bad woman." The assistant eventually realized what she wanted: cortisone. —N. M.

Are You a Poor Sleeper?

A scientist answers some basic questions about insomnia, a problem which we all face at one time or another

Interview with
LIEUTENANT-COLONEL
HAROLD WILLIAMS
Chief of Clinical and
Social Psychology, Walter
Reed Army Institute
of Research, Washington

Q. Colonel Williams, how widespread is insomnia?

A. It is a frequent disorder. I suppose everyone has it at times. It's a product of daily tensions and anxieties. There is no formal definition of insomnia, but if a person is unhappy about his inability to sleep, then he's got it. And in severe cases, he should get help.

Doctors are likely to tell you that if you worry about insomnia you will just get worse. If you simply can't sleep on a given night, get up and do something else. Do something you like doing—work on your hobby or read.

Q. Is there danger of sleeplessness going on indefinitely?

A. You'll go to sleep eventually. The best cure for insomnia, I suppose, is insomnia. It's unlikely that you could stay awake—when you are really anxious to go to sleep—for more than 36 to 40 hours. Unless, of course, you have been taking naps during the day. The doctor will try to see that you avoid taking naps to compensate for sleepless

Condensed from U.S. News & World Report

nights. The important thing is to get to bed at a reasonable hour, and to maintain a regular sleep routine.

Q. How much sleep should a person get each night?

A. Generally speaking, people need between seven and eight hours, but there is no standard requirement. Some people get by very effectively on six hours; others need as much as nine or ten.

Q. Can losing a little sleep each day be harmful?

A. We think it could. We think that you do build up a sleep "debt" over a time. And it may have very subtle effects. A man may not realize he is impaired.*

Q. Can you catch up on lost sleep?

A. It appears that you can. When people have been deprived of sleep for, say, four days, and are then allowed to sleep as long as they like, they'll sleep perhaps nine and a half to ten hours rather than their usual eight on that first recovery night. And they'll continue this pattern for three or four nights. But the total extra sleep they take is a great deal less than what they've lost.

Q. Can you, so to speak, put sleep "in the bank"? If you've got a particularly difficult period ahead, wouldn't it help to sleep longer for a couple of preceding nights?

A. We are reasonably certain this is of no value. On the other hand, taking a nap just before you have to stay up all night is useful.

Q. Why do some people toss and turn all night and fall into a sound sleep when daylight comes?

A. If you begin to fear that you can't get to sleep, you increase your tension, which can lead to tossing and turning all night. One reason why you may at last fall off to sleep about 4 or 5 a.m. has to do with the daily temperature cycle. Your oral temperature varies about one and a half to two degrees through the 24 hours. You generally reach a high temperature point in the late afternoon or early evening, and a low point sometime between midnight and dawn, usually about 4 to 6 a.m. When temperature goes down the body tends to relax. It's at the low point that you feel sleepiest.

Q. Does mental exercise before retiring deter sleep?

A. I think that mental exercise in the sense of working out problems just for enjoyment undoubtedly helps towards reaching the relaxed state. On the other hand, working on real problems, such as how to stretch your income, builds up tension and probably leads to insomnia.

Q. Does coffee keep you awake?

A. Most certainly. Coffee is an effective stimulant, about half as strong as a commonly used chemical "stay-awake" compound. I'm not talking about drinking coffee at

lunch or dinner, or more than an hour before you plan to retire. In fact, the chances are that a heavy coffee drinker—several cups a day—is sufficiently adapted to this so that it hasn't any special effect.

Q. What about a "nightcap" to assist one in going to sleep?

A. Well, anything that tends to relax the body tends to induce sleep. But it depends on the individual. Anything that is done regularly by a person as part of the process of getting to sleep helps that person to get to sleep. In general, if a man has a reasonably comfortable bed, if he retires to a quiet place and puts himself into the customary position of sleep, then sleep is likely to be induced.

Q. Is counting sheep any use?

A. Counting sheep probably does have an effect, as does any rhythmic stimulation. Dr. Ian Oswald, of Edinburgh University, recently completed a study in which an extraordinary barrage of stimuli was used. He periodically flashed a light in his subject's eyes, at the same time giving him a fairly strong electric shock and exposing him to loud jazz music. He found that this rhythmic pattern of stimulation would induce sleep quickly, even in a man who had had a full night's sleep before the experiment took place late in the afternoon.

Q. Doesn't that seem to be the opposite of relaxation?

A. You would think so, but this involves the monotony of repeated stimuli. If a surprising event occurs —for example, if you hear a siren outside—it brings you sharply to wakefulness. Even slight, low-intensity stimulation that is unexpected —such as being brushed on the face—is likely to wake you. But monotonous stimuli tend to induce sleep.

Q. Does this mean that if you have a loud-ticking bedroom clock, you might sleep better?

A. I think this is probably true.

Q. Is it important to keep your bedroom cold?

A. Yes, it's better to have it cool enough so that you need a blanket.

Q. Is it important to have outside fresh air?

A. I don't think it has any basic importance. Some people, however, find that if they don't open a window they can't get to sleep, because it's part of their habit pattern of getting to sleep.

Q. Will bedtime snacks help you to sleep?

A. Again, I think it depends entirely on habit. A person who characteristically prepares for bed by having a light snack—certainly he wouldn't want to eat a heavy meal —would find that it was harder to sleep if he didn't have it.

Q. Do you know what effect smoking has on sleep?

A. The onset of sleep is accompanied by a number of changes in the body, including slowing of breathing, dilation of the peripheral blood vessels in the hands and feet,

slowing of heart rate. Smoking tends to produce vasoconstriction, increased heart rate, and more rapid breathing—all physiological changes that are precisely in the opposite direction from those that occur with sleep. So I would assume that smoking would tend to work against going to sleep.

Q. Is a 15-minute nap in a chair just as beneficial as 15 minutes' sleep in a bed?

A. Probably not. The normal bed is obviously not a necessity for healthy sleep: other cultures sleep on floors, in half-sitting positions, and in hammocks. Soldiers learn to sleep on the bonnets of trucks and in dug-outs half full of water. But we believe that it's more difficult to reach deep sleep in a position that is not customary.

Q. If you dream exciting dreams, will you be less rested than if you dream tranquil dreams?

A. We don't know. No one working with laboratory subjects has ever observed a nightmare. Subjects don't have them in the laboratory, or they don't report them.

Certainly a person who is being bothered by nightmarish dreams, provoking a great deal of fear, is not getting a very restful sleep. Often the acutely disturbed patient who reports insomnia doesn't dare go to sleep, because his dreams are so terrible he simply can't tolerate them.

Q. Do you feel that sleep remains basically a deep mystery to men of science?

A. That is certainly true.

Cartoon Quips

DOCTOR, looking over X-rays, to patient: "Between the big, happy family at your office and the big, happy family at home, you've got an ulcer." —B. B.

ANGRY woman to credit manager: "But you people were the ones who said the payments would be easy!" —B A.

DISTRAUGHT dentist to mother of small boy: "Two fillings. Don't let him bite anyone for at least an hour." —D. T.

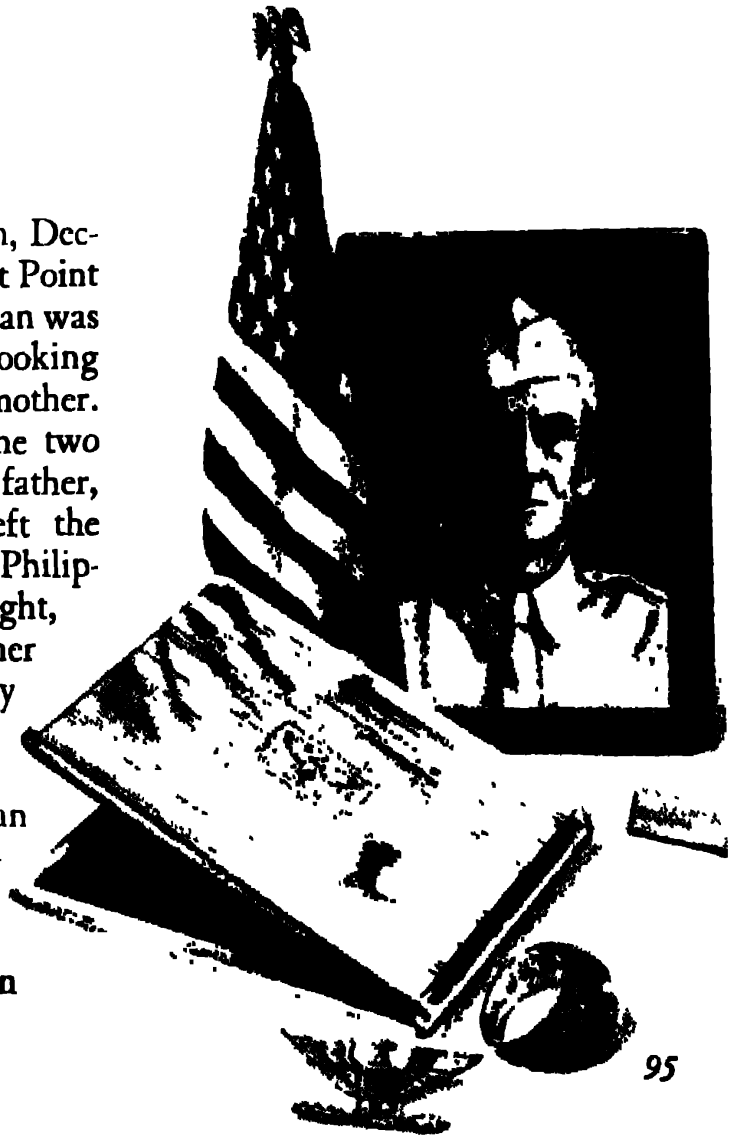
EMPLOYEE to boss: "The rat race being what it is, I could use a little more cheese each week." —Salo

WIFE to visitor, as husband lolls on couch: "Fred is content to be a leaf on the twig of the limb of the branch office!" —D. M.

MIDDLE-AGED man to friend: "I've made a fool of myself many times just trying to prove I wasn't an idiot." —H. P.

The Mission of Lieutenant Hilsman

The story of a young soldier's quest for his father



By John Hubbell

On Sunday afternoon, December 7, 1941, West Point Cadet Roger Hilsman was strolling along a path overlooking the Hudson River with his mother. Only a few weeks earlier the two had said good-bye to Roger's father, an Army colonel, as he left the United States for duty in the Philippines. Emma Hilsman, a bright, vivacious woman, had seen her husband leave for many trouble spots in 25 years of marriage, but now the deteriorating relations with Japan filled her with concern. Colonel Hilsman, who knew the Philippine Islands and their people well, had been

one of a group sent for by General Douglas MacArthur, then Commander-in-Chief of U.S. and Philippine forces.

When the colonel's overseas orders had arrived, he had hurried to West Point to say good-bye to his son. As he was leaving, he apologized for not having had time to get a farewell gift, and insisted that Roger take the newest thing he had —an aluminium cigarette case. On December 7, Roger thought of this incident, and remembered that it was now almost Christmas. He suggested to his mother that they find a present for the colonel in the Thayer Hotel gift shop, not far from where they were walking.

In the shop, music issued from a radio. Then, stunning as a thunderclap, came a news flash: Japan had attacked Pearl Harbour! The air assault had been devastating. With the enemy's strike continuing elsewhere in the Pacific, the Philippines were sure to be a centre of action.

Emma Hilsman went deathly pale, but in a few minutes she was the colonel's lady again. "Your father knows how to take care of himself," she said quietly. Roger nodded. He knew his father's fierce will and the skills he had acquired from a lifetime of soldiering with distinction.

During the following weeks, Roger and his mother learned from the newspapers that Colonel Hilsman had been appointed to the command of a U.S. Army garrison to train 2,000 Filipino volunteers. The garrison was at Davao, on Mindanao, southernmost of the Philippine Islands. On December 7, Japanese dive bombers had swept down on Davao, which the enemy prized as a staging base for an invasion of the Dutch East Indies. On December 20, the town fell to a Japanese task force of cruisers, destroyers, aircraft carriers and assault ships.

After that there was no word of Colonel Hilsman. The War Department knew nothing. For Emma and Roger Hilsman, the flame of hope flickered low.

Then one day Roger was visited at West Point by Father Manuel Ortiz, Jesuit chaplain to Philippine President Manuel Quezon. When Quezon and his party were leaving, the priest said, they had stopped at Negros, an island north of Mindanao. There they had encountered Colonel Hilsman. The Filipino troops proudly told of their fight at Davao under his leadership. After the hopeless battle, they had made an incredible 31-day march across the mountainous Mindanao wilderness. No man had ever traversed that interior before, but Colonel Hilsman had led his group through. He would not permit anyone *not* to make it!

The colonel had asked Father Ortiz to get word to his family that he was alive. The priest recited for Roger the battle cry of the Filipino troops under Colonel Hilsman's command: *Pot-i na ka Davao!* (Kill

now for Davao!) After his visitor had left, Roger slowly, carefully scratched inside his West Point class ring the words Father Ortiz had brought him: *Pot-i na ka Davao.*

But jubilance was soon shattered. The War Department reported that Colonel Hilsman was a prisoner of war; he had surrendered when the enemy threatened the slaughter of every last captive from Bataan and Corregidor unless all U.S. forces in the Philippines laid down their arms. There was no indication whatever of where, in the wide East Asian sphere of Japanese control, he had been imprisoned.

In his room, Roger sat alone, thinking. Suddenly the war had become very personal to him. He made a vow that somehow he would find out where his father was, and fight his way to him.

In June 1943, Second-Lieutenant Roger Hilsman graduated from West Point. Advanced training and manoeuvres followed. From Army Intelligence he learned that the senior American officers captured in the Philippines had been taken to Formosa. This meant that he *must* get combat duty in the Pacific. One day an urgent call came for volunteers for "an extremely dangerous mission." Jungles were mentioned in the dispatch. "Jungles" meant the Pacific!

Thus, in May 1944, Roger was among 2,600 reinforcement troops on their way to join Merrill's Marauders, a unit soon to earn fame in Burma. Major-General Frank Merrill's force had just seized an airstrip near a Japanese stronghold at Myitkyina, in northern Burma. The Marauders were barely hanging on; they needed help.

The battle for the Myitkyina airstrip was to rage for a nightmarish 55 days, and Roger and the other new arrivals learned quickly that life depended on nerve, instinct and luck. Apart from battle casualties, the men were ravaged by dysentery, malaria and jungle rot. At the end, there would remain of Roger's company only 23 out of 232 men, and the entire officer complement of six had to be replaced twice. Roger lasted a long time—25 days—before his number came up.

He was leading an advance patrol, probing deep into the jungle, seeking out positions of enemy strength. Suddenly he signalled his scouts to a halt; he had seen the glint of metal in a clump of bush ahead. In the next instant, gunfire burst from the bush. Roger felt his carbine ripped from his grasp, saw it go dancing through the air, saw his leading scout fall. Then a blow on the chest sent him sprawling into a shallow ditch below a low rice-paddy wall. There was a tingling numbness in his right side, and for a few seconds he lay there thinking, "It can't be serious. I can't leave this war—not yet!"

As Japanese soldiers moved towards him, he heaved himself up, lurched over the paddy wall. Rifle

fire slammed into the wall; he ran low towards the protective cover of deeper jungle, reached it, found his other two scouts. The three headed back towards their own lines through the protective jungle.

With their lines in sight, Roger fell unconscious. The battalion medical officer found 16 bullet holes in his uniform, and four bullets had struck home. Three had entered above his right hip bone. The fourth had been heading straight for his heart, but had been deflected by something in his right breast pocket. It was the aluminium cigarette case his father had given him at West Point. Obviously, Roger still had unfinished business in this world.

Surgery lasted a painful eternity as Dr. Gordon Seagrave, the "Burma Surgeon," worked slowly, skilfully. Roger was then evacuated to an army hospital in Shimbwiyang. There, after weeks of convalescence, he began haunting British and U.S. headquarters. What were Allied plans for Formosa? Was anything known of the prison camps there? Eventually, he learned that the Japanese, fearing an invasion of Formosa, had removed the senior U.S. officer-prisoners to a prison camp near Mukden, Manchuria!

Roger was warned, however, that many officers captured early in the war had been tried for "war crimes" and executed. Also that conditions of transport from the Philippines to Formosa had been horrible: prisoners had been packed into the holds of ships and given little or no food or water; disease had killed them by the thousands.

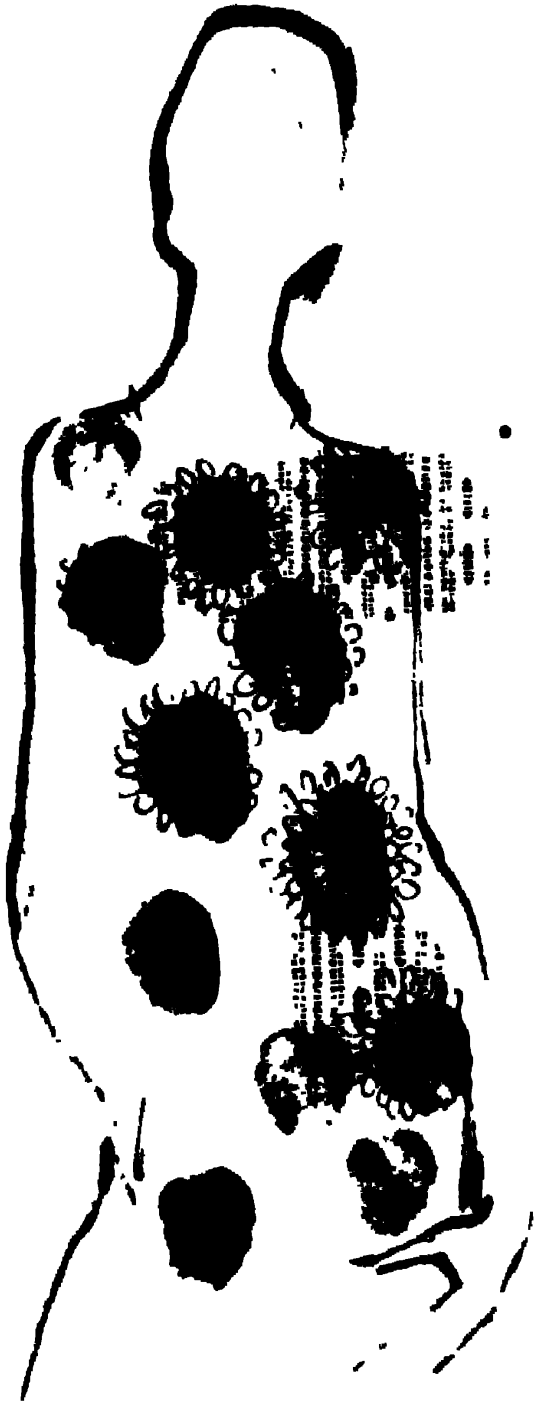
But Roger would not believe that his father was dead. The young lieutenant determined now to get to Mukden. He hitchhiked by plane to Kunming, China, hoping to line up a field assignment with a unit fighting near Manchuria. "No more combat for you," he was told. He went to Ledo, India. Everywhere the same answer: "With your wounds, the war is over. Go home." But Roger knew that his own personal war was far from finished.

In the end, he went to Colonel William Peers, head of the Office of Strategic Services operations in Burma. Peers asked a curt question: "Why do you want more combat?"

"I'm a professional, sir. I've had only 25 days of this war. I'd like another crack at it."

Peers guessed, correctly, that the war meant something special to this young officer. And he could use a West Pointer with a knowledge of jungles. "O.K., lieutenant," he said, "I've got a job for you."

Roger's appointment was as OSS liaison officer to the British 14th Army in Burma. Four months later, Peers gave him command of his own guerrilla battalion. Now, with 300 Burmans, he cut down enemy patrols, fell on outposts, supply depots, trains, truck convoys. So effective was Roger's guerrilla band that the Japanese pulled some 3,000 men



out of the fighting in the north to run him down. Still, each day he and his guerrillas rained havoc on Japanese concentrations in a different area, then faded off to some distant fastness.

By the middle of 1945, the Allies controlled Burma, and Roger, who had been promoted to captain, disbanded his guerrillas and reported back to Peers, enquiring when he could leave for Mukden. Colonel Peers now knew of Roger's determination to find his father, but he could only give him another liaison job, in southern China.

Then, even as Roger was en route to his new post, word arrived of the atomic attacks on Japan and that the U.S. high command had ordered that the officer-prisoners at Mukden were to be rescued. Peers instantly sent word to Roger: he was to draw a parachute and proceed immediately to Hsian, in northern China, to join the rescue team.

Lieutenant Hilsman (right) reunited with his father



Roger took off for Hsian at midnight, and arrived there after dawn —only to find that the rescue team had already left. He was hustled aboard a B-24 and followed. There had been no formal Japanese surrender, but the Emperor had directed his forces to cease resistance. It was feared, however, that the fanatical Kwangtung Army in Manchuria might slaughter its captives and keep on fighting.

Hours later, Mukden hove into view and, as the plane approached an airfield, Roger prepared to jump. But the pilot stopped him; two Russian aircraft were on the airstrip below, which meant that the Japanese had surrendered and it was safe to land.

On the field, a Japanese general explained that orders to surrender had just arrived; that the rescue team which had parachuted in ahead of Roger had been captured, but was now being released. The general told Roger how to find the prison camp near the city.

At the gate of the camp, a G.I. sentry snapped a salute, pumped Roger's hand. Roger braced himself to ask the question he had fought his way across the world to ask: "Is there a Colonel Hilsman here?"

The answer came fast and clear—and it was almost incredible. "Yes, sir, that barracks there. First floor."

Roger stared at the sentry, trying to take in what he had heard. Then, by an immense effort of will, he was



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moving, approaching the building. He was aware of men coming forward and shouting at him, but he walked past them, as if in a trance. Slowly he climbed the stairs.

There, at the top, sitting on a wooden bunk, was his father. Three and a half years of imprisonment had left him thin to the point of gauntness, but the old military bearing was there. For a long, uncertain moment, each searched the other's face. The older man rose slowly, a look of amazed, unbelieving recognition in his eyes. Softly, almost inaudibly, he said, "My God. My God." Then the two soldiers embraced, and Roger said, "I've brought you a present, sir." In his hand was the aluminium cigarette case his father had given him almost four years before.

First Flight

A WHITE-HAIRED, bespectacled lady, with a small boy and a smaller girl in tow, walked into the American Airlines building at New York's Idlewild Airport. "This is my first ride in an aeroplane, and it's my grandchildren's first ride, too," she told the clerk who took her tickets. Assuring her all was in order, he put the baggage on the conveyor belt. "Your flight is loading right now, Gate 6," he said.

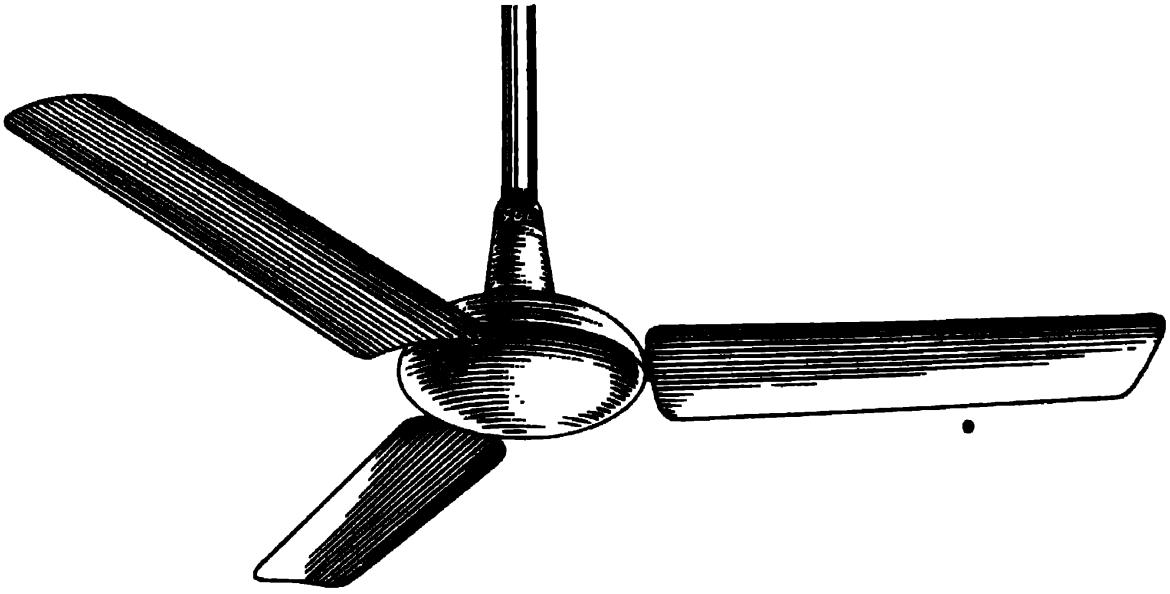
The old lady and the children trudged to Gate 6. Directly over the baggage-conveyor belt at Gate 6 there is a chrome railing between the arcade and the belt. The old lady pushed the children under the railing, then ducked under it herself. One by one she picked up the children and set them on the belt. A suitcase and a bag of golf clubs followed. Then the old lady, undaunted, sat down on the belt. The momentum tipped her back a bit, but she steadied herself and managed to duck as she went through the baggage aperture. She whirled swiftly into the spiral steel chute and down into the baggage room. "Good heavens!" cried one of the baggage handlers. "Here comes another one!"

Strong hands caught her as she shot after the suitcase and the golf clubs, and she was lifted out of the chute and seated on some luggage along with the children. "Well," she said, "that was *quite* an experience."

"Yeah," said one of the baggage men. "For us, too."

"Isn't this Gate 6?" asked the old lady.

By that time a covey of American Airlines personnel had rushed to the baggage room, and they carefully examined the three chutists. There wasn't a scratch or a floor burn among them. Then the grandmother and children were escorted to Gate 6, and even through the entrance bridge into the plane. "You've all been so kind," said the old lady, settling into her seat. "I'm sure I'm going to enjoy the trip." —N. M.





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The rise of venereal disease is now a major problem for public health authorities everywhere. This stark and shocking case history—typical of many countries—illustrates the spread of a scourge that was once nearly eradicated

V.D.
The Vicious Chain

By Fred Warshofsky

Facing each other in a small office in Newark, New Jersey, were a young man and a teenager. The man was 27-year-old Tim Lindman who has one of the most important public-health jobs in the United States. Tim is a venereal-disease investigator, one of hundreds trained by the U.S. Public Health Service. He is now appointed to the Newark Health Department. More precisely, he is an epidemiologist, whose specialized, vital task is to trace the chain of venereal infection from patient to patient until all contacts have been unearthed and treated. It is a tough, demanding job that leads to bars, luxury flats, private houses, street corners, brothels and, alarmingly, schools and playgrounds.

The youth he was talking to that day was a 16-year-old I shall call Victor. A test had revealed the presence of reagin in Victor's blood. Reagin is an antibody manufactured by the body in response to an invasion of *Treponema pallidum*, the organism that causes syphilis. There were other signs, too, indicating secondary syphilis. He was immediately treated with penicillin and sent to Tim Lindman.

Lindman represents the most vital part of America's venereal-disease programme, the contact interview. Syphilis is a wildly infectious disease. Lindman's task was to find all

Condensed from Today's Health, published by the American Medical Association

those people who might have been infected by Victor and who might themselves now be capable of spreading the disease.

"Victor, the doctor says that you have syphilis," Lindman began. "You may know it as bad blood, syph or by some other term. It is a venereal disease, and virtually the only way a person can contract it is by sexual contact with an infected person."

At this, the youngster leaned forward to object, but Lindman waved him into silence. "The germ that causes the disease cannot live outside the human body for more than a few seconds. So it is impossible to catch the disease from a toilet seat or a dirty drinking glass.

"Now, we've started you on a course of treatment and you will be cured, but what about the person you caught it from? And you may have given it to other people before coming here. That is what I would like to talk to you about. Since last Christmas, how many different girls have you had relations with?"

Lindman's choice of Christmas as a starting-point was deliberate. It was almost exactly six months earlier, a critical period during which Victor was in a highly infectious stage of the disease.

"I can't remember," the boy said angrily.

"Come on, Victor, surely you can make a guess. Was it 20 girls, 50?"

"No, it was more like five."

"All right, let's talk about those five girls. This interview is confidential, but we must know the names of all the people with whom you had contact so that we can help them before the disease permanently damages their health and before they can spread it to others."

"O.K. The first was Lila. That was the day after Christmas. We were at a party and——"

The interview continued for another half an hour. Before it was over, Victor had supplied ten full names—girls with whom he had had sexual relations. Their ages were between 12 and 17.

The information provided by the youngster set Tim Lindman on a trail that eventually led to 96 other teenagers, in all parts of the city and as far away as South Carolina. Eighteen of them had syphilis. Tim Lindman's sleuthing prevented countless other youngsters from catching the frightful disease.

Because of its mode of transmission, syphilis has long been a taboo subject in most American homes. Few schools offer any information. This basic lack of knowledge, coupled with increasingly casual sexual behaviour, creates a climate in which venereal disease can spread like a raging fire over the land.

Each year syphilis kills 4,000 Americans, and in 1962 it infected a reported 20,000. Moreover, a recent survey conducted by the American Social Health Association in co-operation with the American Medical Association revealed

that nearly 50 per cent of syphilis cases go unreported. Expert opinion suggests that possibly 1,200,000 people in the United States are now afflicted with untreated syphilis.

The microbe passes from one person to another only through the mucous surfaces of the genital tract or mouth, or through a break in the skin. Once these delicate, spiral organisms get beneath the skin or mucuous membranes, they enter the lymph capillaries and are gently floated to the nearest lymph gland. Here they roost, multiplying and growing. Within a short time they continue the journey, passing into the bloodstream, which whirls them to every part of the body. Eventually the pale, flexing microbe has burrowed into the internal organs. The attack is swift and secret, for not one outward sign of the disease's course has been displayed.

Now firmly entrenched, syphilis commences its malignant, extensive and prolonged destruction of tissue, bone and organ. Usually about three weeks after infection the first sign appears—a chancre, or sore, at the point of contact. About nine weeks later, lesions and rashes pit the body, and syphilis is now in its most infectious stage. A sore throat, swollen lymph glands and fever often accompany the skin eruptions. Singly or collectively the symptoms may resemble those of any one of a dozen other diseases.

These signs vanish of their own accord, but the disease lies hidden and enters the final two stages—latent and late syphilis. The disease may slumber quietly within its host for many years. Then with little or no warning it launches a debilitating attack, perhaps on the nervous system, destroying the body's psychomotor functions. It may mount the spinal column and erode the reasoning centres of the brain, causing insanity, or it may attack the optic nerve, pitching its victims into blindness. The *Treponema* may invade the cardiovascular system, damaging the aorta and perhaps the coronary arteries. Death often results.

In 1910, a reasonably effective method of treating syphilis was discovered: Salvarsan, a preparation of organic arsenic. But the cure took 18 months. Then, in 1943, Dr. John Mahoney, a U.S. public-health researcher, found that penicillin completely routed the *Treponema*. This quickly became the standard treatment for syphilis. The recommended course in the early stages of infection is 2·4 million units of penicillin injected in one dose. By 1954 an all-out educational treatment and investigation campaign sent the number of cases plummeting towards the elusive goal of complete eradication.

But since 1957, syphilis has made a stunning comeback. One of the reasons was stated by Dr. William Brown, a leading specialist in venereal-disease treatment: "As a programme for control of a disease



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approaches the end point, meaning eradication, it is not the disease but the programme that is likely to be eradicated." Funds to fight syphilis were sharply reduced, and the disease made new gains. Against the rising tide, epidemiologists such as Tim Lindman struggle to break the chain of infection.

Lindman moved rapidly to round up the contacts named by Victor. Of the ten girls, four were found to be infected. Another one had gone to stay in South Carolina. "I gave the information to the New Jersey State Health Department in Trenton," said Lindman, "and they phoned the South Carolina department. Within two days the girl had been found. She was infected and they treated her there. She named four sex contacts, all in Newark."

Soon Lindman was working with several dozen boys and girls in a chain of infection that seemed without end. "The five infected girls we got from Victor provided us with 18 more names. We were lucky, though—only two of that group were infected. These two boys named another 11 girls, with three infections. They in turn led us to 15 more contacts, but again we were lucky. Most of the boys had been with them just before they had picked up the infection, and we found only one positive in this group."

At this point, the epidemiological chart that Tim Lindman was drawing began to take on the appearance of a huge, somewhat misshapen Christmas tree. "I was beginning to hope we were nearing the end, for the boy I was then interviewing—Frank, No. 11 on the list of infections that could be traced to Victor—was certain about the number of girls he'd had relations with during the infectious period—five."

Lindman located the five girls and brought them to the clinic. Blood tests revealed only one infection.

"I had my fingers crossed at this point," recalls Tim. "If only that girl had not been too promiscuous, we might have stopped it right there." But she named seven contacts. Wearily, Tim went after the new crop. Six of them were free of the disease. The seventh was Victor.

"I went out after him and brought him down to the clinic. The two of us sat in the interview room and waited for results of the blood test. He had finished his treatment the first week in July, and the date of this exposure was the middle of August. There was a chance that enough penicillin was still in his bloodstream to prevent reinfection."

The slim chance vanished—Victor's blood test again was unquestionably positive. The chain of infection he himself had started had twisted round to reinfect him. What was more, he named five new contacts. They would undoubtedly name still more, and the chain would stretch on and on. Would it ever end? Tim Lindman set off to the first address.

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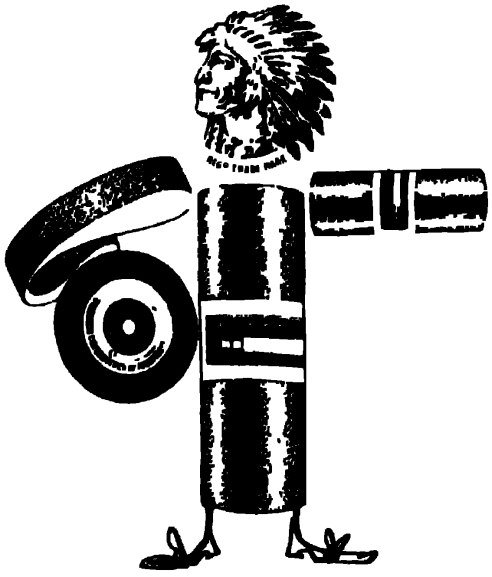
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CUZ/1947A

Last Gasp of the Tin Goose



In a 31-year-old plane, 13 uneasy volunteers make an unforgettable journey down memory's airlane

By Anne Chamberlin

At Dulles International Airport in Washington, a complete lounge—chairs, people, ash-trays, *everything*—detaches itself from the terminal building and moves off on huge wheels to deposit passengers aboard a jet parked across the field. This is one more example of the way air travel has gone beyond the fringe.

The air passenger, that frail bundle of doubt, is now processed, packaged and sealed up in an aluminium tube like so much frozen rhubarb. The pilot, that clean-cut, confident young fellow you used to see up there in his shirt sleeves, steering, has become a disembodied middle-aged voice out of the upholstery telling you you're 35,000 feet above Geneva. You have to take his word; it's too far down to see what's written on the roofs.

All things considered, it's easy to

see why a small band of us were drawn to Los Angeles recently when Trans World Airlines decided to re-enact the first "all air" passenger flight across America, aboard a 1929 Ford trimotor, known in its day as the Tin Goose. TWA planned to put a crew in vintage uniforms and haul 13 terrified people across the United States, following the same schedule as the first flight which left Los Angeles at dawn on October 25, 1930.

We were fêted the night before at the Los Angeles airport in what was referred to by TWA personnel as the "last supper"—a frankness that has simply disappeared from modern air travel. The happiest people there were the old-timers who had flown in the trimotor when it was new and were not going to have to do it again. They were full of helpful phrases like "Fear is just a state of mind."

Everyone who wasn't going on the Tin Goose flight, in fact, was in high good humour. A TWA vice-president recalled that on one flight he had "thrown up all the way from Burlingame to Winslow." When a waiter dropped a tray of dishes, TWA president Charles Tillinghast chuckled and said that it was probably one of his airliners landing.

Our trimotor, we were told, would be one of about ten still in one piece, so to speak. One is in the Ford Museum in Dearborn, Michigan, where it belongs. Ours, Number 414H, had been tested and apparently found wanting by the U.S. Navy 33 years ago. It had since hauled passengers, carried chicle gum in Guatemala and sprayed gipsy moths in Montana. It now belonged to John Louck, of Monmouth, Illinois, who tours aviation shows, giving passenger flights at three dollars a head. TWA had hired the Goose and its barnstorming crew for the re-enactment. I calculated it had about six more miles to go before collapse.

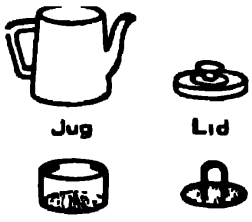
Our pilot, 39-year-old Jack Marshall, had flown in Korea and been a crop duster and barnstormer (the kind of background that made you wonder if he hadn't just about run through his luck). The co-pilot, Dave Runyan, was 24—ten years younger than the plane.

Our first sight of the floodlit Tin Goose, at 4.30 a.m. in the Los Angeles smog, inspired great confidence. It made you think that if this thing could fly, anything could. The two side engines were encased in what looked to me like discarded milk cans, with slits in them, the various loose metal parts kept together by big safety-pins. The third engine, stuck on the front, was the one some of us liked the best. You couldn't see whether it was running or not, which left you free to concentrate on the other two.

The wheels were hitched on to metal struts, with a small cable added, no doubt to catch them in case they started falling off. The

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cabin was panelled in peeling mahogany and had 15 metal seats, which vibrated like reducing machines. The NO SMOKING sign was nailed permanently to the wall to remind us that the fuel tanks were in the ceiling over our heads, and we came to look forward to the clean smell of fresh petrol in the cabin after each stop. It meant they had remembered to refuel. Nobody tells a passenger that kind of thing any more.

A sign by the throttles read INTENTIONAL SPINNING PROHIBITED. The pilots could slide open their side windows, which was handy, because the windscreen would often fog up, and they could reach round and wipe it with paper towels.

The only constant in air travel is luggage. TWA sent our bags ahead on another plane to Kansas City, a sure sign that we would spend the night somewhere else, like Wichita, which we did. Our bags were then sent to Newark, and we spent the night in Columbus, Ohio.

The real test, of course, was getting our tin packing-crate into the air, and, for me, the issue was in doubt on every single take-off. We made 13 of them. We would charge down the runway, blue flames spouting from our right engine, smoke pouring out of the left. That morning as we laboured into the sky over Los Angeles and disappeared into a blinding bank of grey smog, we enjoyed our first thrill of Passenger Participation. None of that radar stuff here. The pilot couldn't see a foot farther than we could.

This was followed by many other thrills denied air passengers today. A trip back to the chemical toilet jeopardized the equilibrium of the entire plane and caused the pilot to crank the trim control and glare back over his shoulder. I found the heating-and-cooling system consisted of paper napkins—stuffed in the vent above the window for heat, removed for cooling. During cold spells we wrapped our feet in newspapers. It was nice not to have to ring for the stewardess.

We enjoyed going *through* the Rockies instead of *over* them. You really get an idea of how formidable a mountain is when it's *above* your plane. In fact, the only thing that took our minds off the mountains and made us wonder how the pilot planned to get through them (especially after he came back for a new map) was when a bolt came out of the left engine. Oil spurted from the hole and the engine began to look like a hot-fudge sundae. Somebody asked the pilot when the engine would pack up, but there was not much point in asking questions—the cabin noise in a Tin Goose makes it like putting through a long-distance call next to a pneumatic drill.

At Parker, Arizona, where we put down to look for a new bolt, we discovered something else that has gone out of air travel. Our arrival



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was an *Event*. Policeman Lauren Hightower saw an unauthorized object about to drop on his territory and came to the airfield in his squad car with a gun. He was followed by Joe Burns, who wore a T-shirt that said MR. HORSEPOWER. He had been filling his swimming pool when he recognized our faltering antique overhead from having worked on trimotors in San Diego. Mr. Horsepower went to the Ford garage, and we soon had a handsome new brass bolt—from an outboard motor.

We had some effect on nearly everybody we flew over. As we strained for altitude over the Colorado River, a woman on water-skis took one look at us and fell off. In Winslow small boys came to stroke the Goose's corrugated flanks, and a woman said we were the biggest thing to happen there since the Hopi Red Indian snake dance. In Amarillo men in cowboy boots came from the Chamber of Commerce to roll out a red carpet for us.

Flying at 2,000 feet at a sedate speed of about 85 miles an hour, we passengers acquired all the power of back-seat drivers. To get to Albuquerque, for instance, you follow Route 66, turn right over the dry river bed and follow the railway lines. The pilot claimed we passed a car on Route 66. I claimed it was parked. A lot of cars passed *us*.

After Indianapolis, en route to Dayton, we detoured over Antioch College because one of the passengers had gone to school there. At Pittsburgh Mrs. Thelma Jean Hiatt Harman, TWA's first stewardess, came aboard to carry our last lunch trays. Now a grandmother, she wore the very same white uniform in which she had carried trays aboard DC-2's. "We used to say, 'We carry it up on a tray and bring it back in an airsick container,' " Thelma Jean reminisced.

We found the swimming-pool count very high between Philadelphia and Princeton, where we observed a man mowing his lawn in tennis shoes. We followed the New Jersey Turnpike to Newark, using Exit 14 to reach the airport. And we *knew* it was Newark because it was marked on the roof.

It had taken us nearly three full days—54 hours and seven minutes—to get there, a full day longer than the original flight. Twenty-five thousand people had crossed the States in the 350 jet trips that took them 35,000 feet up while we were down there scraping trees. But I claim we were the only ones who *knew where we had been*.

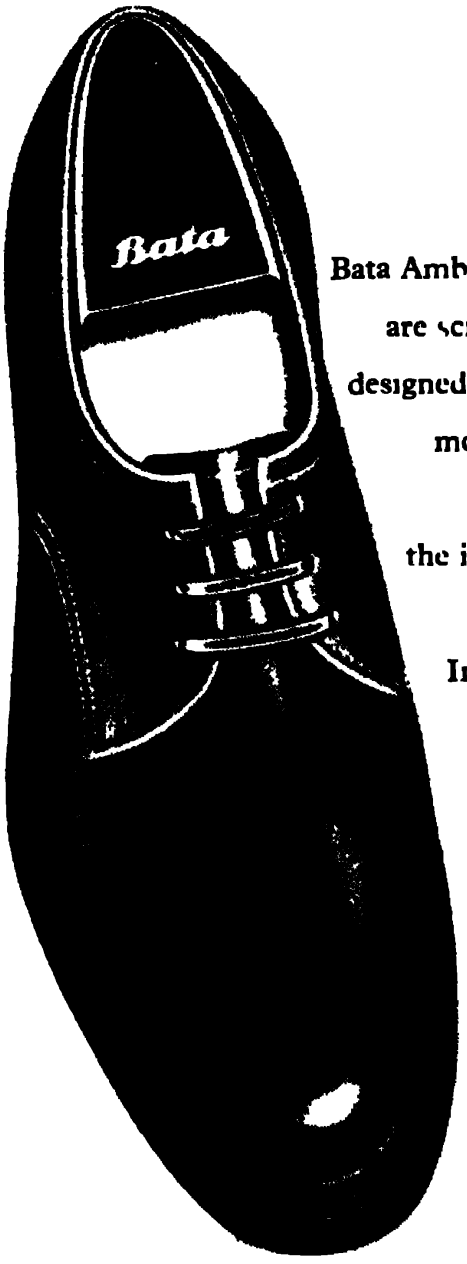
We all stood a little taller, somehow, as we watched the colour drain slowly from the face of the Newark Airport functionary who asked our pilot what "flight plan" he had in mind for going on to Idlewild. "Flight plan?" our pilot said in the tone a man gets when he has just crossed the United States of America by railway line and rooftop. "I thought I'd just fly out over the water and look around for it."

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My Most Unforgettable Character

By Russel Crouse

Oscar Hammerstein gave the world, in a succession of imperishable lyrics, something of his own profound faith in the goodness of life



If ever there was one in real life, the tall, rugged man with the closely-cropped greying hair qualified as the "cockeyed optimist" of whom he was to write in one of his most famous songs. But that night in New York City, watching him enter the theatre, I suspected that his optimism might be nearing the ragged edge of doubt.

As the houselights dimmed, he slipped into a seat on the aisle beside his wife and touched her hand for a moment. Surrounding them was that most cynical of juries: a Broadway first-night audience, ready to pass judgement on the new musical for which he had written the book and lyrics.

"If they don't like this one, I don't know what I'm going to do," he had said to his wife on the way to the theatre. For, after more than a decade of success, he had been racked by almost 11 years of failures, as inexplicable as they were demoralizing. Nor did this venture hold much promise of ending the lean years. There were no stars in the cast. The out-of-town reviews had not been enthusiastic. Opening night was not even sold out.

After the curtain went up, he watched intently—not the stage but

the audience. He took his wife's hand again. ("Playwrights' wives," he once told me, "are the only women who know how a man feels when his wife is having a baby.") But as the first act unfolded, he relaxed, recognizing the signs he had learnt to hope for: a smile here, a warm sigh there, laughter, a flash of animation. At first just sparks in the dim auditorium, they gradually fused into a glow whose warmth you could actually feel.

That night's radiance extended far beyond the St. James Theatre and far past that night of March 31, 1943. For the play was *Oklahoma!* and the man was Oscar Hammerstein II. On that night he and his composer - collaborator, Richard Rodgers, made theatrical history. This was no conventional "musical comedy" or "operetta." The inspired team had created the "musical play," a new form in which words and music coalesced into brilliant unity.

When Oscar Hammerstein awoke the next morning and read the reviews, he could well have sung his own lyric:

Oh, what a beautiful mornin'!
Oh, what a beautiful day!
I've got a beautiful feelin'
Everything's going my way!*

RUSSEL CROUSE is the co-author of many famous hits, including *Call Me Madam* For his recent collaboration, *The Sound of Music*, Oscar Hammerstein II wrote the lyrics.

The calamitous years were over. With Rodgers, Hammerstein went on to fashion hit after hit, among them *Carousel, South Pacific, The King and I, Flower Drum Song, The Sound of Music.*

When Oscar Hammerstein died on August 23, 1960, his fame was as wide as the world. Millions of playgoers on every continent had paid everything from dollars to drachmas to see the musical shows he had written with Rodgers and, earlier, with Jerome Kern, Sigmund Romberg, George Gershwin, Rudolf Friml, Vincent Youmans and Arthur Schwartz—46 shows in all.

His imperishable lyrics were on people's lips and in their hearts: "Ol' Man River," "Some Enchanted Evening," "People Will Say We're in Love," "Indian Love Call," "Lover Come Back To Me," "It Might As Well Be Spring," "June Is Bustin' Out All Over," "The Last Time I Saw Paris," "Climb Ev'ry Mountain."

Yet it wasn't just because of his prodigious triumphs that Broadway darkened its lights for three minutes on a night shortly after his death, and that London's theatreland followed with a similar tribute. It was because Oscar Hammerstein was probably the most beloved man in the world of the theatre.

And not without reason. Framed on his bedroom wall was a certificate which read: "Oscar Hammerstein is a good boy." It was just as

true at 65, when he died, as it was at eight, when he was at school.

I can't recall ever having heard anybody say anything against Oscar Hammerstein, which is truly remarkable for Broadway. The explanation is that Oscar made an art of respecting people. He didn't idealize them; he didn't think it was important to love them all—but he did believe it was important to understand them.

There was no one he wouldn't help. In fact, that's how I met him, a good many years ago when I was a new boy in the theatre, entangled in my own ineptitude. I had written my first musical, and when it opened out of town it resembled a nightmare. A few days later a tranquil young man appeared in the confusion.

It was Oscar. He had once written lyrics for the music of Lewis Gensler, one of the show's producers. He had heard that his friend's enterprise was in trouble, and for ten days he worked valiantly to save something that couldn't be saved. I had my first flop, but what was more important, I had a new friend.

There was something about Oscar that drew him to people with problems, and he always knew what to say to them. A taxi driver who drove him about a great deal summed it up: "He was a healing sort of guy."

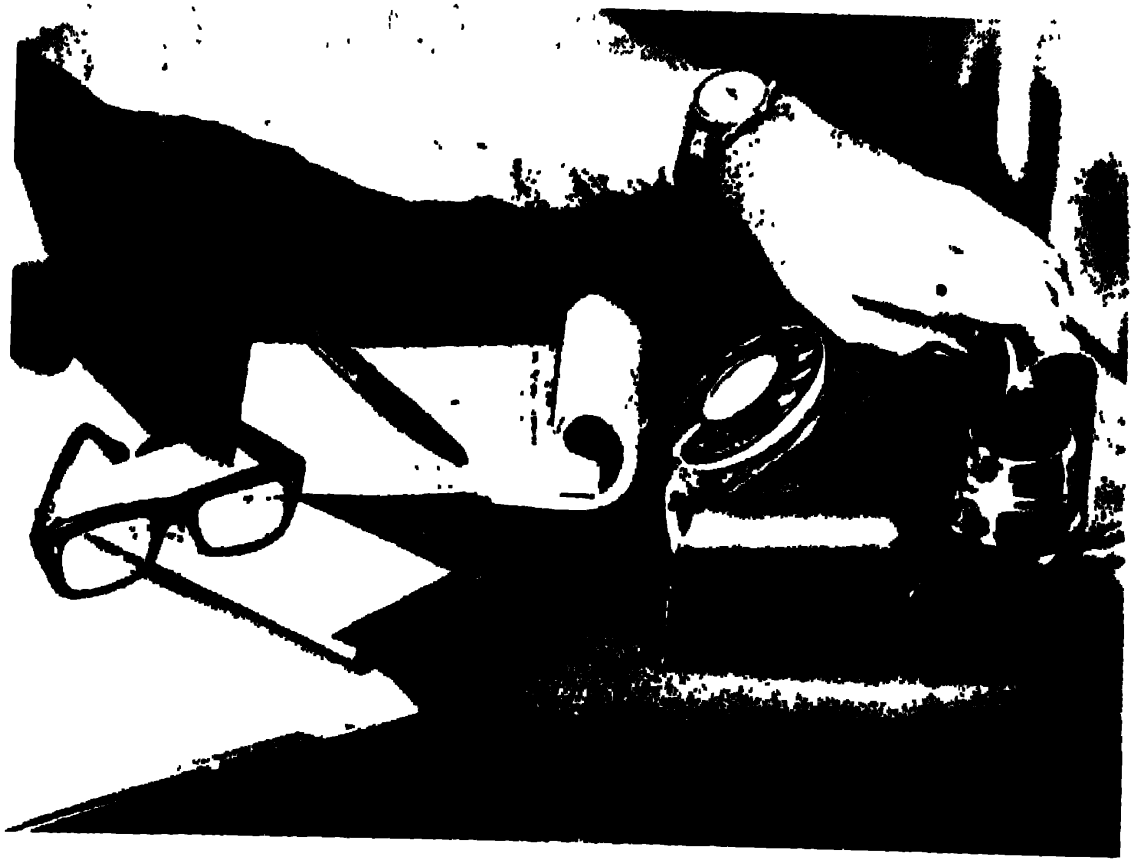
Oscar accepted the simple verities and put them into graceful phrases to enable the world to feel with him. Joseph Fields, who collaborated with him on *Flower Drum Song,* says, "Oscar really *believed* that love conquers all, that virtue triumphs, that dreams do come true." He never denied the "accusation" that he was a sentimentalist.

"There's nothing wrong with sentiment," he once said to me. "The things people are sentimental about are the fundamental things in life. I don't deny the ugly and the tragic—but somebody has to keep saying that life's pretty wonderful, too. Because it's true. I guess I just can't write anything without hope in it."

Oscar was big—six foot two and nearly 200 pounds, and he walked with a long, easy gait. His most remarkable feature was his rough-hewn face, which Mary Martin likened to carved granite. "But then you saw those blue eyes," Mary says, "and you recognized behind the rugged exterior Oscar's great gentleness, sensitivity and deep sincerity." What made him great in his field was that sincerity, the wisdom of his sentimentalism, the philosophy of his hope—and an unerring sense of theatre.

Everyone found a ready explanation for that sense of theatre in Oscar's paternal grandfather, Oscar Hammerstein I, who certainly had it. The first Oscar was a short, bombastic German immigrant who became rich through a cigar making machine, which he invented, and vaudeville, which he didn't invent

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call me, put the telephone on his piano and play me what he had written the night before." *Show Boat* opened in 1927, ran for 572 performances, has had countless revivals and been filmed three times.

With the stock-market crash in 1929, a pall settled over Broadway. But Hollywood had been clamouring for Oscar for years, and he went to California with a fabulous contract.

However, his integrity didn't fit in with the slick, superficial musical films of the day. His first two pictures were flops, and eventually the studio offered him 100,000 dollars to call off his contract. "The most money I ever heard of anyone getting *not* to write," he said wryly.

"The furies" moved in on him in earnest, bringing a series of failures. He shuttled between Hollywood and New York—films and theatres. His first marriage had ended in divorce after 11 years. His one truly major success of this otherwise dark period was his second marriage—to Dorothy Blanchard, an Australian actress. It was she who almost inadvertently turned the tide of his frustration. One night in Hollywood she said, "It's better to wear out than to rust out." The next morning Oscar told her, "We're going back East to stay." They went to their farm in Bucks County, Pennsylvania.

There, one day in August 1942, Oscar got the most important telephone call of his life. It was from Richard Rodgers, with whom he had once collaborated on a song for the Columbia Varsity Show. Rodgers had gone on to Broadway acclaim with Lorenz Hart, writing a succession of brilliant musical-comedy hits. The next day, at lunch in New York, Rodgers explained his problem. The Theatre Guild wanted Rodgers and Hart to turn Lynn Riggs's play, *Green Grow The Lilacs,* into a musical. Rodgers was eager. Hart was ill and adamantly opposed. Rodgers was loath to go on without Hart but had a family and a career to consider. Hammerstein was reluctant to replace a partner of long standing. It was agreed that Dick would try again to interest Hart. He did, but Hart wouldn't even listen to him. A quick handshake a few days later launched the historic partnership of Rodgers and Hammerstein.

The first decision was that they would not let any of the musical-comedy conventions shackle them in their search for honest expression. With that simple precept, they began work on what was to become *Oklahoma!*—and virtually a new art form. There came the cardinal moment when Oscar took Dick his first lyric, "Oh, What a Beautiful Mornin'." "When I read it," Dick says, "I was a little sick with joy—it was so lovely and so right." People marvel that he wrote the melody for it in ten minutes. Rodgers says,

"The wonder is I didn't break a leg getting to a piano."

Oscar's ill-starred years came to an end with *Oklahoma!'s* triumphant opening, but a week later he ran an advertisement in *Variety,* the theatrical trade paper. There was no mention of the new hit—only a list of his past failures with the simple statement: "I've done it before and I can do it again." Of course, he never did it again. Rodgers and Hammerstein went from hit to hit, until even their fame became famous.

Throughout their association the two worked as one fused talent. The only way in which they differed was in their method of work. With Rodgers it was a painless joy; music seems to run out of his fingertips. With Oscar it was the joy that came with suffering, although, when sung, his lyrics sound effortless. "There was an almost inevitable musical pathway leading from Oscar's words," Dick says.

In mid-September 1959, with the New Haven opening of *The Sound of Music* only a week away, Oscar was operated on for an ulcer. Afterwards, we suspected it was cancer —everyone but Oscar. His wife and Dick and Dorothy Rodgers *knew.*

"For ten months," says Dick, "we played the worst kind of make-believe. The four of us kept making plans for things three of us knew would never happen."

Oscar reacted well to the operation and in mid-October joined us in Boston where *The Sound of Music* was trying out. He brought with him the last lyric he ever wrote, "Edelweiss," a song of simple folk quality, to be sung by a man about to leave his native land, never to see it again.

It was some months before Oscar noticed that he was losing weight. When he saw his doctor, he said directly, "Tell me the truth." The doctor told him he had cancer and that it was terminal.

Oscar went to his farm. He called his three children and his two stepchildren to him, one at a time, and told them. "I've had a full life," he said. "I have no complaints—and no regrets."

In a song for *Carousel,* called "You'll Never Walk Alone," he had written:

> When you walk through a storm
> Hold your head up high
> And don't be afraid of the dark.*

Now Oscar faced the dark. He met death with the belief in life he had expressed so often in his songs. That's why they are part of his immortality.

* "You'll Never Walk Alone," © 1945 by Williamson Music Inc., New York

THERE's one sure way to stop a red-hot argument—drop one cold fact on it. —*B.J.T.*

By Joan Paulson



Top Dog

Every day is Ludwig's day

Visitors to the University of California's Berkeley campus often assume that Ludwig Fountain, the students' most popular meeting place, is named in honour of Beethoven, or perhaps some generous graduate. It isn't. It's named after a dog—Ludwig Schwarenberg, a liver-and-white German short-haired pointer. Every day from early morning until the campanile chimes five, the celebrated canine is at his fountain, graciously greeting students and faculty, receiving offerings from their lunches and romping in his private dog bath.

When Prince Philip visited the university in 1962, he paid his royal respects to Ludwig. The ceremony of His Royal Highness scratching the mournful hound behind his slightly wet ear was widely televised.

Ludwig's emergence as top-dog-on-campus is recent. Three years

Condensed from San Francisco Examiner

ago he was an unknown gun-dog happily retrieving pheasants for his master, John Littleford, an engineer living in Albany, a Berkeley suburb. But when the Littlefords moved into Berkeley, Ludwig became a vagabond. He went on long tours, which often ended in his being ignominiously carted home in a police-car.

During his wanderings Ludwig discovered Berkeley's new fountain in front of the Student Union. He joyfully plunged in. When a student tossed an empty milk carton on to the ground, Ludwig retrieved it. Ludwig was home. His retrieving abilities became a campus wonder. Building workers perched high on scaffoldings would toss empty containers from their lunch to the ground. Ludwig would retrieve them and climb the ladders to return each container to its owner.

When a penny pitch was set up in the fountain to collect money during a fund-raising drive, Ludwig, bewildered by the project, did his best. That night, he suffered an upset stomach and came up with 21 cents for the cause.

Such devotion to duty did not go unnoticed in Berkeley's hallowed halls. The *Daily Californian* honoured Ludwig with a front-page story. Finally, the student governing body passed a motion which named the fountain after Ludwig. On April 21, 1961, the Regents of the University of California made it official.

Last year at an all-university conference in Berkeley, on to the speakers' platform majestically walked Ludwig. He paused to sniff each dignitary, turned as if nodding approval to the audience and walked off. "Now," said the University President, "you see who really runs the university."

Retort Discourteous

WHEN the German Emperor visited Pope Leo XIII, Count Bismarck tried to follow into the audience chamber. A gentleman of the Papal Court motioned him to stand back, as there must be no third person at the interview. "I am Count Bismarck," shouted the German, as he struggled to follow his master. "That," replied the Roman with calm dignity, "accounts for, but does not excuse, your conduct."

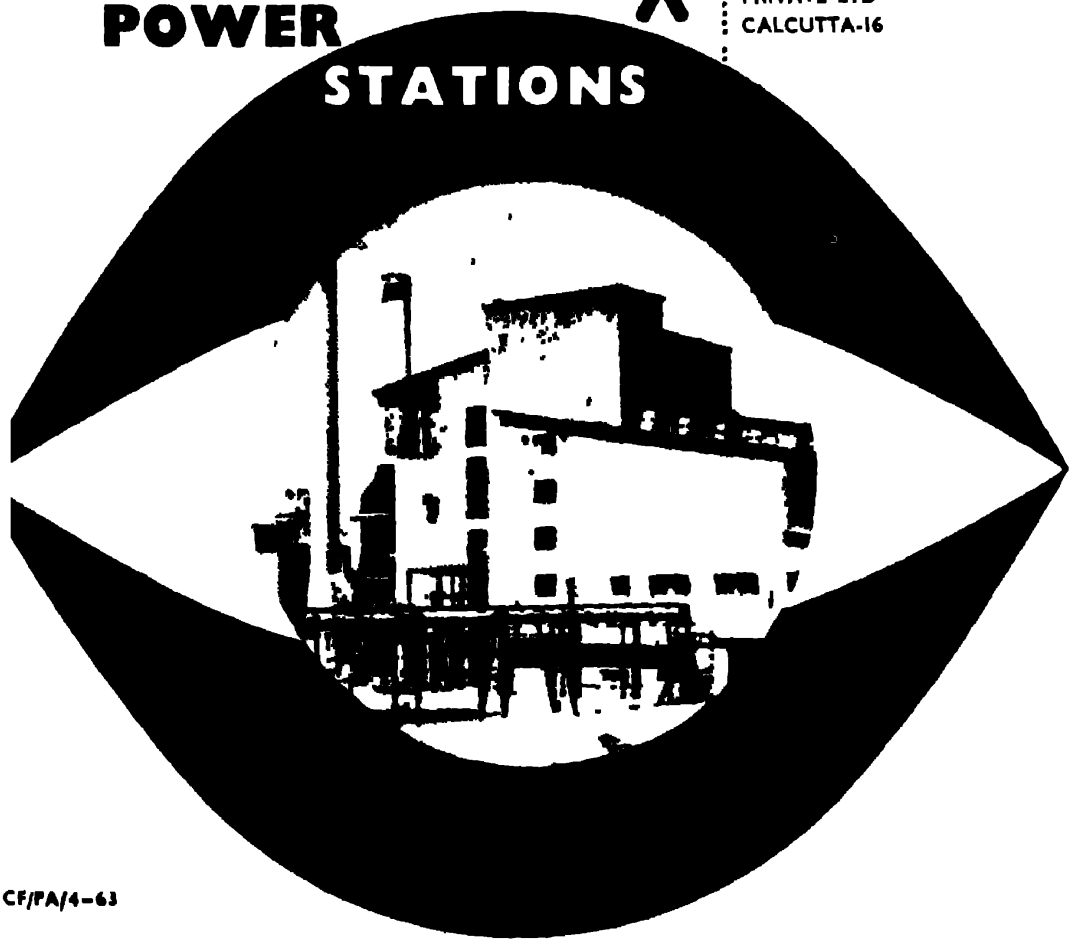
THE Duke of Wellington, at the height of his fame, was walking down Piccadilly, London, when a gentleman came up, took off his hat, and said: "Mr. Brown, I believe?" The Duke's answer was simple and direct: "Sir, if you believe that you'll believe anything." —*Time*

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Khrushchev's Hidden Weakness

In Eastern Europe 97 million people yearn for freedom--and look to the West as their only hope

By Richard Nixon, *former Vice-President of the United States*

Last July 24 I went into East Berlin escorted by five carloads of Communist agents and East German journalists. The people I met were obviously afraid to show any signs of recognition or friendship. Those who did speak to me were immediately questioned by the police.

That evening I went back to East Berlin without advance notice. This time the secret police were not aware of my presence until I had been in the city for two hours. Now people came up to me eager to express their friendship for the West and their hatred of the Communist government.

Last summer I also visited Budapest, where—in October 1956—Khrushchev put down a revolution, while the request of the free Hungarian government for U.S. help went unanswered. For this reason I did not expect a friendly reception. Yet everywhere my wife and daughters and I went, we were swamped by people who wanted to shake hands, or say a word of greeting, or ask a question about the West. It seemed that every other person I met had a relative who had fled from the country after the revolution. One after another, even with policemen standing near by, said, "I wish I had gone, too."

These experiences brought back memories of my arrival in Warsaw in 1959. Only three weeks before, Khrushchev had been given a cool reception in Poland, despite the Polish government's efforts to

Condensed from The Saturday Evening Post

provide a "spontaneous" demonstration of affection. The people had even been given free flowers to throw at his car in a "typical Polish welcome." But most of the Poles simply kept the flowers.

I was therefore amazed to find that although the time of my arrival in Warsaw and my route through the city had not been announced, 100,000 cheering people lined the streets. So many hundreds of bouquets of flowers were showered on us that the driver had to keep stopping to clear the windscreen. These personal incidents could be multiplied a thousandfold by the experiences of others who have travelled in Communist-controlled Eastern Europe.

Khrushchev knows that he is sitting on a powder keg. He knows that the overwhelming majority of the people of East Germany, Hungary, Czechoslovakia, Poland, Bulgaria and Romania hate their Communist governments and would rise against them if they thought they had a chance to succeed. He knows that millions behind the Iron Curtain would leave their homes and go to Free Europe or the United States if they were allowed to do so by their governments. And he knows that the people of the captive nations consider the West their main hope for ever obtaining freedom.

Today, Khrushchev hopes to keep the lid on this Pandora's box of troubles for his Communist empire by negotiating a non-aggression pact between the NATO nations and the Communist Warsaw Pact group.

This would give him exactly what he wants—recognition by the West of the legality and permanence of his Eastern European Communist regimes. He knows that all he now has are squatter's rights in these countries, obtained through force, subversion or *coup d'état*. For him, a non-aggression pact would be a deed of ownership—a legal title from the West.

Yet there are strong pressures for the West to make such a deal. I believe that only the mobilization of an aroused and informed public opinion will prevent the sellout of the right of 97 million enslaved people in Eastern Europe to be free. More and more talk is heard about "accommodation," "disengagement" and other devices which add up to approval of Soviet domination of Eastern Europe. A negative do-nothing policy can only destroy the morale of millions of anti-Communists in the Communist world.

I believe the time has come for a complete change of direction and emphasis in foreign policy towards that area. Some clear thinking must be done about what is at stake for the Eastern Europeans, for the Communists and for the Free World.

The Communist goal is to impose slavery on the Free World. Our goal must be nothing less than to bring

freedom to the Communist world. Our policy must be guided by one overriding principle: we stand for freedom—not only for ourselves but for *all* people. I believe that this objective can and must be accomplished without war.

Eastern Europe is Khrushchev's greatest potential weakness; it is the area of greatest potential strength for the Free World. What, then, can be done to help these people achieve their freedom?

First it must be recognized that there are some things that cannot be done. There should be no loose talk of starting revolutions in these countries in which thousands of Soviet troops are stationed, with millions more poised on the border. We need only recall the tragedy of the Hungarian Revolution. This was a true people's revolution. Thousands of workers and students succeeded in overthrowing the tyrannical Communist government. Then the Soviet Army marched into the streets of Budapest. The freedom fighters asked for help; they were given sympathy. What more could have been done short of risking world war is open to question.

I think the crime committed by Khrushchev and his Communist puppets in Hungary was so great, however, that more dramatic methods should have been used to bring it to the attention of the world. First, when Khrushchev refused to withdraw his troops from Budapest, the United States should have broken off diplomatic relations with the Soviet Union. Second, the organization of "volunteers" should have been permitted in free countries to help the freedom fighters. This is the action the Kremlin has taken in corresponding situations. Third, when the puppet Kadar government was set up in place of the free government, a government-in-exile should have been recognized. This would have been a symbolic rallying point not only for Hungarians but for people throughout Eastern Europe who admired their courage and shared their ideals of freedom.

I believe that there must be a single standard for freedom. Its denial anywhere, in any place in the world, is surely intolerable. The ghetto, that grim relic of man's injustice to man, must go, wherever it exists. And this includes Eastern Europe, the most shocking ghetto of them all.

The Free World cannot write off 97 million people—people who now live in a place they are not allowed to leave, under a government they did not choose, and with no right to demonstrate, to vote or otherwise to voice their opinions against the tyranny which has been imposed upon them.

Let us take at face value the claim that Khrushchev will be irritated by any raising of the issue of freedom for the captive peoples. Is this not the time to test his intentions? A



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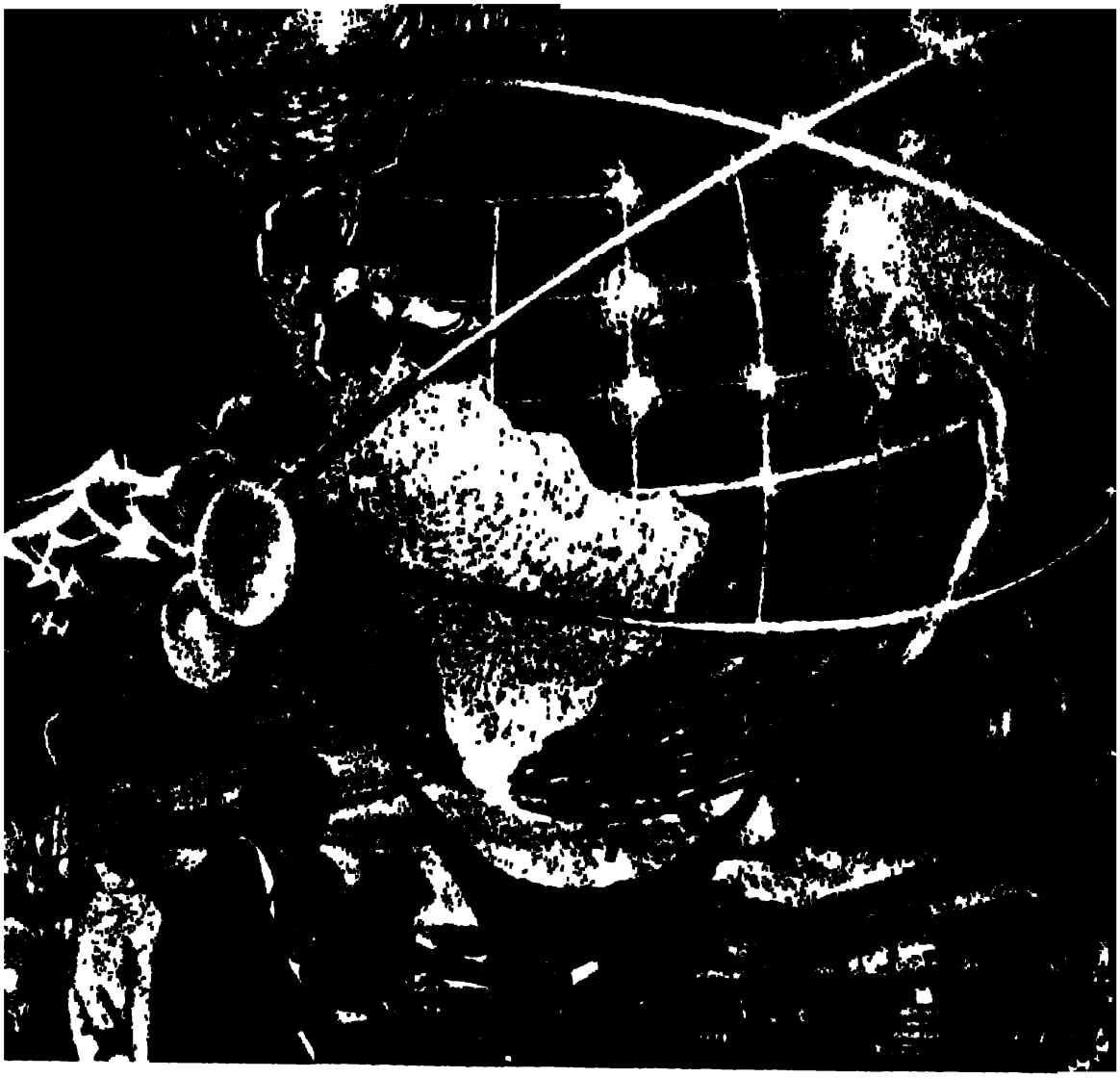
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nuclear-test ban has recently been agreed with him. The "new" Khrushchev is being pictured all over the world as the leader in the fight for peace and in reducing tensions between East and West. But what has he actually done to reduce tensions?

It is claimed that the danger of a war has been lessened by the signing of the test ban. But there is no doubt that if the danger of war has been decreased, the danger of defeat without war has been substantially increased.

In Western Europe, in the United States and in Latin America the Communist parties are stepping up their programmes aimed at the overthrow of free governments. Communism has made its greatest gains through this kind of indirect aggression. All signs point to an inescapable conclusion: A great new Communist offensive is being launched against the Free World, an offensive all the more dangerous because it is without resort to war, difficult to recognize and to meet effectively.

Such an offensive cannot be met and defeated by a static policy of defence. It is altogether right and necessary that the U.S. Government has declared to the people of West Berlin that if they are attacked the United States will help defend them. But the goal must not be simply to keep freedom from shrinking; it must be made to grow, too.

What are some positive things the West could do on behalf of

freedom for the 97 million people of Eastern Europe?

• Above all, the hope of freedom must be kept alive in their hearts. This means resisting Khrushchev's every attempt to gain recognition of the legality and permanence of Communist domination of their countries.

• Each of the East European countries must be treated on an individual basis. Although their governments are Communist, they are no longer a *bloc* in the monolithic sense. The people in each of these nations fear and distrust the Russians. They also have great national differences among themselves. Nationalism, which is growing in Eastern Europe, is a problem for Khrushchev. But it is the Free World's ally.

• These goals should be set: (1) get the Soviet occupation forces out of the countries of Eastern Europe; (2) get the Communist governments to allow citizens to leave if they desire to; (3) get the Communist governments to adopt a let-live policy towards the countries' established churches and other institutions of freedom; (4) increase direct contact with the *people,* including visits from high-ranking officials to remind them that they are not forgotten; (5) increase the exchange of publications, broadcasts and other instruments of communication, especially those designed to keep the young people in contact with the Western world. There is a real danger that a new generation will grow up with no knowledge of any other way of life, because of lack of contact with the Free World.

• A distinction must always be made between the Kremlin and puppet governments on the one hand and the people on the other. The Kremlin's failure to win the voluntary allegiance of the peoples of Eastern Europe is one of the strongest deterrents to Soviet actions that might lead to war. We who are free must never forget that the great majority of the people living under the Communist governments are our friends.

At Budapest station, as our train was about to leave for Vienna, a railway worker came up to me. Speaking in halting English, he said, "My brother left in 1956 and is now living in Columbus, Ohio. If you should see him, will you tell him that he was right? I should have gone, too. And I hope to join him before it is too late."

The train started to move before he finished, but he kept running alongside. "The address," he shouted. "I forgot to tell you. It is on Euclid Avenue in Columbus. Tell him I hope to join him—tell him—tell him . . ." The train had pulled away before I could get his name.

He was trying to send a message to his brother. But as far as I was concerned he was sending the poignant and unforgettable message: "Don't let us down. We want freedom, too."



A Boy's Ordeal by Fire

Only the soles of his feet escaped the searing flames of the explosion. But courage, a doctor's devotion and the will to live brought Bobby Von Kamp through

By Joseph Blank

"After the second explosion, I ran out of my house and looked down Avenue O," a neighbour of the Von Kamps said. "About 50 yards away I saw a ball of fire moving towards me. Then I looked closer and saw that the ball of fire was a boy!"

The neighbour grabbed the boy, Bobby Von Kamp, and rolled him on the road to smother the flames. Then he tore off the boy's charred clothing. As he worked, he could hear the clang of approaching fire engines and ambulance sirens.

Bobby Von Kamp, two weeks away from his 11th birthday, lived across the street from a petrol storage tank on the Houston, Texas, waterfront. At 7 p.m. on January 24, 1961, he was watching television with his 14-year-old brother Edward and a 12-year-old friend, Herman Holcombs. His father, a seaman,

was on a ship off the coast of Florida, his mother had just gone to the grocer's and his two older brothers were out for the evening.

As the Bugs Bunny cartoon was going off the air, the boys smelt petrol. High-octane fuel had been leaking out of the storage tank across the street. Suddenly the vapours exploded. Clouds of flame boiled through the air, licked through the open windows. The three boys dashed for the front door. Eddie held open the screen door as another explosion shook the street. He caught a burst of flames on his back. Part of the screening in the door simply melted into nothing.

The boys ran. Eddie slipped and fell. Herman said, "I'll stay," and knelt by his friend. Bobby yelled, "I'll get help!" He ran down the street with flames streaming from his clothing.

As soon as ambulances arrived, Bobby and Eddie were rushed to the Texas Children's Hospital. Herman, the least burned, was taken to another hospital.

As she entered the emergency room of Texas Children's Hospital, Dr. Alice Miller,* a paediatric surgeon, saw Bobby, a "charred statue." He was conscious and able to answer questions. Dr. Miller found that he was burned over 98 per cent of his body—70 per cent third-degree (deep) burns, 20 per cent second-degree, eight per cent first-degree. Only the soles of his feet had escaped the flames. (Extensive third-degree burns are a near-overwhelming insult to the blood and every organ of the body. Few people have survived 50 per cent third-degree burns.)

Bobby's entire spine, all his joints and the tendons of his hands, forearms, feet and legs were exposed. "Where are you going to find the skin to cover him?" a colleague asked Dr. Miller. Mrs. Von Kamp, numbed by the horror of the tragedy, heard someone say, "It'll be a miracle if either of the boys lives."

Dr. Miller says, "I don't believe anything is hopeless until it's proved hopeless. I keep trying. In a serious burn case doctors and nurses have to care very deeply."

After Bobby was wheeled into the operating theatre, he lapsed into unconsciousness. His arms were so burned that the doctor was unable to take his blood pressure to estimate the depth of shock. His entire body was oozing liquids, joint fluids and blood chemicals. At any moment the kidneys might stop functioning—from lack of fluid, caused by oozing, or from inadequate blood circulation, caused by shock.

Bobby required injections of drugs, liquids and blood chemicals, but his body was so burned that Dr. Miller had to search for a good vein. She found one in the left shoulder. At the same time he was given antibiotics to control infection. Bits of

* A pseudonym.

MEN ON THE MOVE



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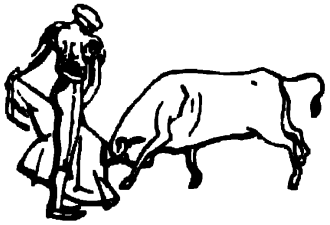
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cloth and dirt were removed from the burns; each finger and toe was dressed separately. Then Bobby was placed on a Stryker frame, a special apparatus designed for minimum contact with the body.

Eddie meanwhile was receiving similar treatment from a general surgeon. (No doctor can do justice to the care of two such patients at one time and still carry on a practice.) Eddie was, from the first, only semi-conscious; he never did become rational.

Dr. Miller worked on Bobby throughout the night. For several days she examined him every two or three hours. "Although he could move only his eyelids," the doctor said, "I could see that he knew what was happening. And I also saw that he had courage and determination. This was important. He would be on the edge of death for a long time, and he would need the will to live."

Pain became a way of life for the boys. Each hypodermic injection was excruciating. Nurses had to change the boys' position every few hours, and whenever they were touched their screams could be heard on other hospital floors. In addition, blood transfusions caused constant anxiety. The boys sometimes received 20 to 30 pints of blood a week, and each new transfusion carried the potential of fatal shock.

"Bobby knew how badly his brother and he were hurt," nurse Rae Whittaker said. "He kept trying to encourage Eddie and cheer him up."

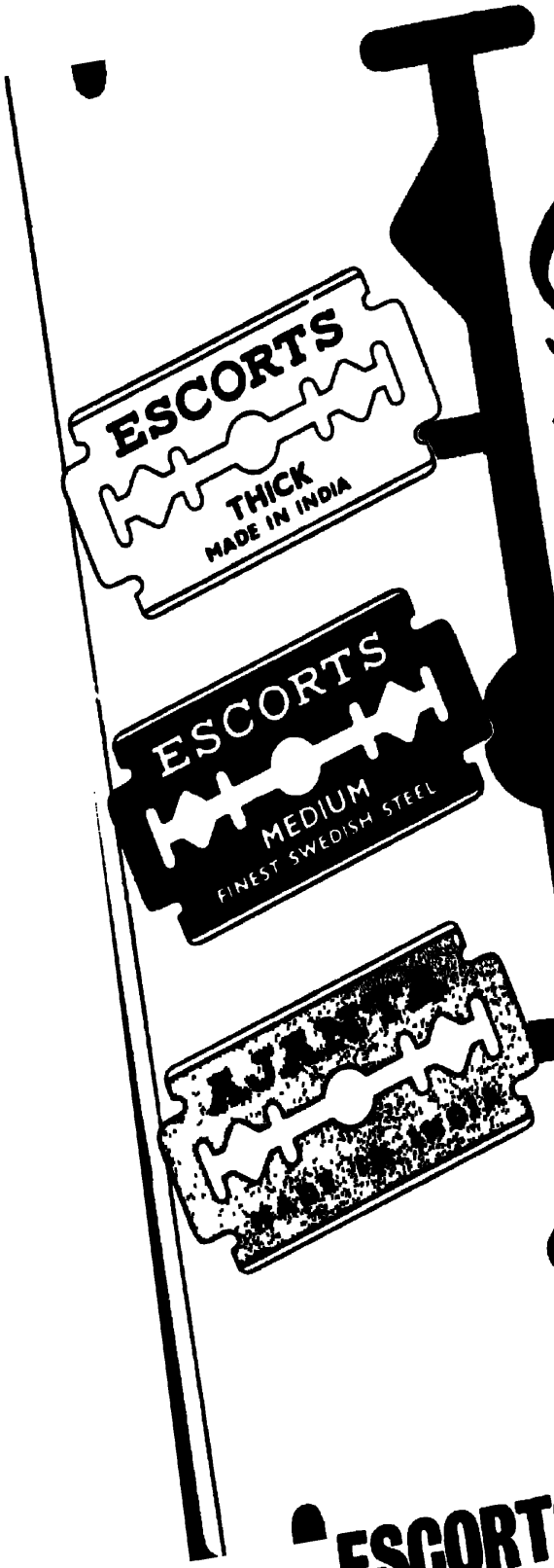
On the 14th day in hospital, Eddie became delirious, and Bobby was visibly disturbed by it. Dr. Miller spoke to him quietly. "We're going to put you in another room, Bobby. It'll be better for Eddie to have a private room."

Before he was moved to his new room, Bobby was first taken to the operating theatre to have his dressings changed, a two- or three-times-a-week procedure so painful that it had to be done under a general anaesthetic. While Bobby was in the operating theatre, Eddie died.

That night Bobby's temperature dipped to 94·4 degrees and his white-blood-cell count doubled, signs of a massive infection. The doctor suspected the onset of fatal septicaemia — blood poisoning. Laboratory work to determine the specific bacteria required 48 hours. If the infection proved to be blood poisoning, Bobby would be dead by the time the report was known.

Dr. Miller decided not to wait. She administered a highly potent drug, one known to be very dangerous to the kidneys—which in this case had already undergone assault from the effects of the burns. It was a risk based on educated guesswork and hope. The gamble paid off. Within 24 hours Bobby's temperature, blood count and pulse returned to normal.

In his new room, Bobby waited



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more than a week before he could bring himself to ask about Eddie. The loss shook him profoundly. He felt that his brother, by waiting to hold open the screen door, had sacrificed his life for him.

He also knew that his own survival was uncertain. Once he asked Dr. Miller, in a tone that combined pleading and challenge, "You're not going to let me die, are you?"

"No, Bobby, we're not," she assured him.

He asked for his cowboy boots to be placed on a table where he could see them. "I'm going to wear those boots some day," he said.

A little more than five weeks after the accident, Dr. Miller began skin grafts. Third-degree burns are so deep that the body cannot build new skin; the skin must be replaced. In the first operation she cut thin, almost transparent patches of skin from the thighs of Bobby's older teenage brothers, William and Larry, and sutured them to the patient's thigh, leg, arm and hand. Skin from another person's body will not graft, but it will last two or three weeks before being rejected. During that time it will protect the surface from infection and reduce the loss of body fluids through oozing.

Then from Bobby's first- and second-degree burn areas, which did heal themselves, she cut postage-stamp-size pieces of skin. These she attached to the critical joint areas, suturing the larger pieces but simply placing the smaller "stamps" on the wounds and applying a pressure bandage to keep them in place.

The long procedure—it took nearly seven hours—was a tremendous undertaking for Bobby, and on the following day he weakened. His temperature rose to more than 104 degrees. His pulse quickened. His neck veins became distended. He appeared to be going into heart failure.

The cardiologist could not determine what was happening inside his heart, however, because there was nowhere on his body to put the leads of an electrocardiogram machine. Dr. Miller assumed that an infection was taking over all his body, and she put him on a regimen of antibiotics. For several hours he teetered between failure and improvement, then gradually his pulse, breathing and temperature returned to normal.

Week after week the struggle to keep Bobby alive continued. As soon as the thighs of William and Larry healed, the boys returned to the hospital to donate more skin. Bobby's own body contributed bits of skin for permanent grafts. The joints of one finger on the left hand and two on the right hand were so hopelessly burned that amputation was required, but from these fingers the doctor salvaged little pieces of skin for grafts.

In the tenth week Bobby began to slide into a deep emotional reaction against his ordeal. He rebelled

against pain and the interminable treatment. He refused to take injections. He didn't want to eat. Since burn cases require an intake of protein to build tissue, the nurses spent hours cajoling, pleading and persuading him to take a few bites of meat. Sometimes they would retire to an office and cry, in frustration, before returning to Bobby and trying again.

The memory of the explosion and the fire now overwhelmed him. When a child popped a balloon in the hospital corridor, he shook and cried. Lighted matches disturbed him. He asked his father not to wear a favourite yellow shirt. At night he had horrible dreams. "Eddie!" he shouted in his sleep. "Let's get out of here! I'm on fire!" Then he awoke screaming.

These psychological problems were as dangerous to Bobby as infection. A clinical psychologist induced hypnosis without Bobby's being aware of it. "Through a process known as hypnotic desensitization," the psychologist explained, "Bobby began to understand that the fire was past and couldn't hurt him now. He was in the hospital. He was safe."

It worked. Bobby never had another nightmare. His determination and optimism returned. He continued to improve. Then one evening at home, Dr. Miller received the news that Bobby's temperature was zooming, his stomach was distended and he was vomiting. The hospital resident doctor ventured that it could be an intestinal block.

Dr. Miller rushed at once to the hospital, examined Bobby, then questioned him about the food he had eaten during the past two days. Well, he had had some chocolate that afternoon. How much? Four, maybe five bars.

The doctor immediately ordered an enema, then gave Bobby a blistering scolding. When she had finished, he said, "I know I'm going to live now. You wouldn't have scolded me like that if you thought I was going to die."

The skin grafts were now taking beautifully, but the unexpected was always routine. Infections flared and subsided. Bobby's lower right leg had been burned to the bone. Since there was no base of tissue on which to place skin, the orthopaedic surgeon recommended amputation. But Dr. Miller was reluctant; she decided to try to save the leg. She drilled tiny holes through the bone into the marrow; the granulating tissue grew through these openings and eventually covered the bone. She had a base on which to graft skin, the skin took, and the leg was saved.

"Everything worked," Dr. Miller said. "We could have lost Bobby at any time. Septicaemia. Other infections. Kidney shut-down. Heart failure. Rejection of grafts. He was transfused with hundreds of pints of blood, and he went through some

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70 major operations. He could have failed during any one of these procedures, but he didn't. In everything we did, we seemed to have the touch of gold."

She had estimated that Bobby would spend more than a year in hospital. But six months from the day of admission, his parents helped him into a wheelchair and took him home. Shortly afterwards he began walking by grimly holding on to the wheelchair and pushing it ahead of him.

A few weeks later, when he first came back to see Dr. Miller, he pushed himself out of the wheelchair in the hospital corridor and then, wobbling and perspiring, walked without support into her office. The two embraced.

Today, Bobby walks and runs with a slight limp. He plays ball and rides a bicycle. Except for a scar near his left ear, his face shows no sign of the ordeal. His body shows scars and grafts, but he's not self-conscious about them.

Several times a year he returns to the hospital for more grafts. Grafted skin will not grow, so until he reaches maturity additional skin must be grafted to match his growth. When in hospital, he likes to spend his time with sick and injured children. Once he stayed awake through the night, trying to give comfort to a girl who had been burnt. "When I see that I make somebody feel a little better," he told me, "I feel a little better. I tell them how badly off I was, and how I am now. I'm not going to let what happened to me stop me from doing what I want to do. I'm just walking on."

"Bobby will make it," Dr. Miller said recently. "He's proud of his life."

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Date · March 1964. Signature of Resident Publisher: T. Parameshwar

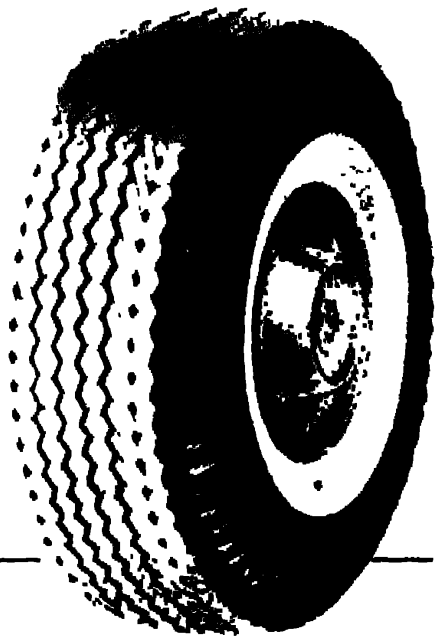
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By Donald Culross Peattie

One of today's most eminent writer-scientists discloses the steps that led him to a sure and certain belief



It was an icy, blustery day when I was sent across the street, at the age of five, with some money to pay my tutor for a week of teaching me to read. In my thick mittens my grip of the bank-note was lost; a wild gust blew the money out of my hand. My sister and my aunt, watching from our house, emerged to hunt for the note. I sat down and shut my eyes.

"For goodness' sake, why don't you help find it?" demanded my indignant aunt.

"I'm praying *you* will," I said loftily, from my pious blindness.

One way or another, the money was found. But I did not long preserve the illusion that prayer is a kind of abracadabra producing magical results. Indeed, I soon grew weary of prayer. To ask divinity for favours seemed to me presumptuous. In times of great moment a prayer might rise naturally to my lips. But for 50 years I could not feel empathy with the many, humanly small petitions that rise constantly from this troubled earth. Such, at least, were not for me to make.

Then, in my 56th year, I fell desperately ill. The doctors told my wife to be a brave woman and give

me up. But hers is a fighting courage and, yes, a praying courage. More, she brought me word that my friend the Neapolitan tailor was praying daily for me, and that the devout waitress in the little restaurant near the hospital included me always in her prayers. I did not question, in my gratitude to them, what weight these petitions could have in the scales that balanced life with death for me. Humbly I discovered a reverence I had lacked. And, lying in my hospital bed, I traced back over the path of my life by which I had come to it.

I had been baptized and confirmed in a Protestant faith known for its mellow beauty. I had loved that beauty, which to my mind was manifest most superbly in the Gothic cathedrals of England. At 17 I had made a pilgrimage to these cathedrals, and at each was swept to glory by the soaring grey arches, the celestial rainbows cast by the rose windows, the ancient sculptured detail wrought in such piety so long ago.

At York Minster, the choir was in full voice; the organ thundered down the nave in a tide of sound that pulled me to my knees. But even in that moment of rapture I caught hold of the tail of my reason: I recognized that it was the mighty power of architecture (which has been called frozen music) and the oceanic music itself that I was adoring—not God. I was experiencing a passion for man-wrought beauty, not a religious exaltation, and I had enough clarity of mind to perceive the difference.

Beauty indeed was my guide, until at the age of 20 I enrolled in the biological sciences at Harvard University, where the professors were great enough to match their subjects. They taught a discipline stern as any religious order's, the discipline of science, and ardently I embraced its tenets.

The first was that no life ever comes from no-life. A culture medium once sterilized and kept sterile would for ever produce no growth —plant or animal. Where did life originate? This was a subject for lively discussion with my roommates into late hours. That it might have been formed under unique circumstances here on earth, or that it blew from between the stars as cosmic dust, were ideas equally stirring to my young mind, and I found an intellectual pleasure in matching this with the words of Genesis: "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul."

A second tenet, equally exciting, was that this planet home of ours

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had a beginning billions of years ago, and that it must have a predestined end when all life on earth, including man, will cease to be. The sun will shrink and cool and become a dead star; the earth, losing atmosphere and oceans, will drift farther and farther from the sun, until in something less than an eternity of time it will be cold as Pluto, most distant of the planets. This prospect exhilarated rather than depressed me, aware that in theology the end of us all is called the Last Judgement.

Most appealing of all to a young man who loved freedom of thought was a third tenet—namely, that there is no Revealed Authority. I was taught that because you read something in the Koran, or the Rig-Veda, or even the Bible, it isn't necessarily true. Moreover, these professors of mine made clear, science is sceptical of its own authority. Darwin, Mendel, Galton, Sir Isaac Newton, I realized with a thrill, may be scrapped at any time in favour of better explanations.

A fourth tenet of science—and again I marvelled at the parallel to the poetry of Genesis—is the fact of evolution. I found that how evolution works is still being argued, but evolution itself is unquestioned—a great and shining fact that makes the world more wonderful.

A fifth tenet was the atomic nature of all matter—not a new idea, but old as the Greek philosophers. I could not guess then that this was a truth that was to reveal more and more terrifying truths.

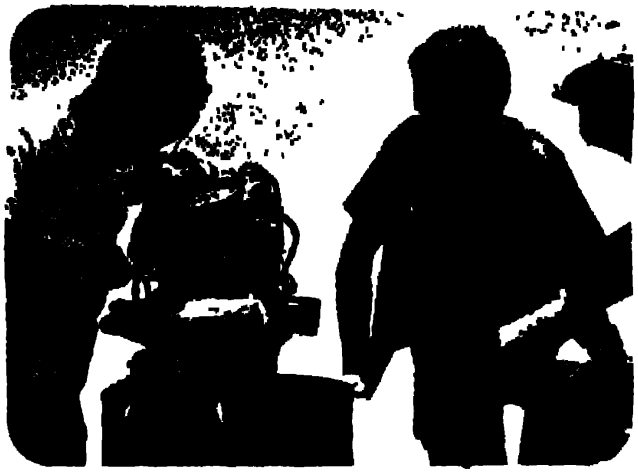
Out of these tenets was formed for me a creed—the creed of pure science. But was there in it, I would pause to ask myself, any foundation for the faith that brings aid to the soul in travail?

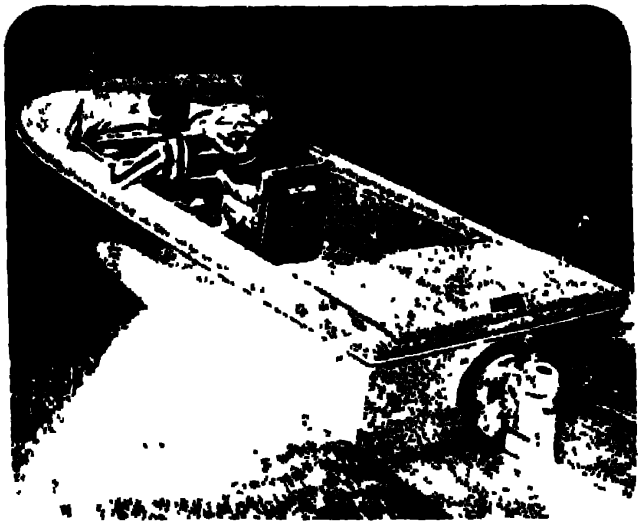
I wondered only passingly, having no troubles. I inclined for a time to become a disciple of Aristotle, that Adam of learning who taught that existence had its origin in supreme intelligence, and that everything has an intelligent cause and serves its useful purpose, that purpose being the development of higher planes of existence. Science, thought the great old pre-scientist, had but to put the pieces of the puzzle together to expose for praise the cosmic design, all beautiful.

It is a contenting concept. Many hold to it today. Peace be unto them. But I went on reading of science such as Aristotle did not dream of, and learned that wise men, probing life and its patterns, found nowhere any certainty, in the vast testimony of nature, that the universe was designed for man. Nor yet for any purpose, even the purpose of self-improvement.

Aristotle said that life is soul pervading matter. But, I argued to myself, he could not have meant by soul the pure moral spirit revealed by Jesus in such searching truths that the best of Christians must struggle to live by them. No, I saw that Aristotle, bless his old soul, meant







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simply life itself. And here, in the morning of my years, I got hold of a form of worship that quarrelled neither with science nor cathedral.

It was worship of life, natural life in all its everyday glory. I loved a spider's web with the dew on it. I loved a pine grove, the shade and the scent of it, and its deep sea-song. I loved the call of the white-throated sparrow in the spring rain, silvery and descending like the slant drops themselves. I loved a flower, whose purpose is to make a seed, and the seed itself, tinily secreting its embryo in the palm of my hand, hiding its purpose, which is to make a flower.

This breath, this life, whose very nature is to die, unconquerably proclaims the glory of both variety and order. We are part of that order. We are the stuff of the tree, which like our flesh is protoplasm. We are the stuff of the stars, for at the nuclear core of each molecule of human blood is an atom of that same iron which comes hurtling down in meteoric fragment. More, every atom has a structure like that of the planetary system with its central sun; the very pattern and force of the atom are akin to the revolutions of our solar system. And on this planet of ours life is the manifestation of some long, slow will to victory that is held up to the sky and the stars.

Armed with this vision, I left university, parting from my roommates, who went their way into the research sciences (where all won scholar's fame). I went outdoors. I went, with vasculum and bird guide, to the Appalachian Mountains in late-spring bloom. Summer found me collecting in the whistling, shifting dunes of Indiana, where the grasses inscribe wind-driven circles in the sand. Autumn found me on Mount Washington, exulting that I knew my place in the world at last—that of a naturalist.

Soon I married; and I saw my wife bear a child, and then others. Now truly I was caught up in the web of life. I saw more clearly that man is a part of nature, and whatever he believes must be based upon this fact.

A man's blood is sea water, and his tears are salt. The seed of his loins is scarcely different from the same cells in a seaweed. A man who goes in no consciousness of these facts is a drifter and a dreamer, without a home, or any contact with reality. I was a believer in divinity, but what I loved was what Thomas Jefferson called "Nature's God."

And this adoration of divine nature stood by me; it withstood even the onslaught of tragedy. Our first child and only daughter was suddenly swept from us by disease. But I did not find her wholly gone. In all things little and gay and innocent I could always find again the feet like rain, the laugh like brooks, the eyes like gentians. Life, I thought, is at its old trick of escaping, changing, transmuting into

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some other lovely shape an imperishable element.

Then, suddenly, after five months in hospital, I too seemed about to go. A surgeon came to my room. We talked of the meadowlarks he had heard carolling on his early drive from home. Then, with one swift stab of the needle, they put me to sleep.

Now I was not there to adore the redwoods as gods rooted in earth, to praise the hermit thrush as heaven's best chorister. Where I was I do not know. No one can say. But it may be that I was not as passive as the body on the operating table.

My wife, as I lay still unconscious and but tenuously holding to breath, spoke to the weary surgeon, who had been working over me for four hours, of my great and grateful love of life. He did not smile; he nodded. "And how that helps!" he told her earnestly.

Humbly I take his surgeon's word for it. I do not understand it; I know now how much I do not understand. Through a long convalescence in that top room of the hospital, where an owl came nightly to keep me company in the big pine outside my window, I discovered how healing are the unspoken prayers of gratitude. Besides my friends, the tailor and the waitress, I had many others to thank. And my thanks, too, went higher.

Months later, when I was home, the surgeon came to visit me. Perhaps my recovery was some small comfort to him, for he who had given me back my life had just lost one dearer to him than his own, his wife's.

The purest prayer, the most skilled science, do not always prevail. Yet in his face was acceptance, trust still in the Great Ally with whose aid we two had won our particular common battle. We did not speak of Him together; there was no need, and He is best talked-to alone. We both knew that He is more than life, and more than death. He controverts no scientific law, no natural processes. He will outlast the shrinking sun and chilling stars. In love of Him there is room for all manner of thinking, including that devout wonder with which I am now content.

Over a century ago a young spinster dying of tuberculosis on the Yorkshire moors, a girl named Emily Bronte, dared to define Him:

Though earth and moon were gone,
And suns and universes ceased to be,
And Thou wert left alone,
Every existence would exist in Thee.

With such assurance, such company, it is easy for a man to travel the last of the road.

THE MARK of a true executive is usually illegible.—Leo Farrell

BOOK SUPPLEMENT

One Small Candle

The Story of the

MAYFLOWER'S VOYAGE FROM ENGLAND



and the

PILGRIMS' FIRST YEAR IN THE NEW WORLD

FROM A FORTHCOMING BOOK

By Thomas Fleming

There are a few moments in history that transcend time and take on an ageless meaning. Such a moment came when 102 English men, women and children boarded the "Mayflower" for a voyage of adventure and hope to the New World.

In a vivid, revealing portrait of the Pilgrims, "One Small Candle" tells the story of a band of farmers, merchants and yeomen who survived threats of shipwreck, mutiny, Indian attack, hunger and disease, and founded a commonwealth under God. It is an inspiring chronicle of spiritual courage and back-breaking toil which became the soul and the sinew of a new nation. But, above all, it is the story of a triumph in brotherhood and love that remains an enduring landmark in man's endless pilgrimage towards freedom and faith





THE SHIP had never carried passengers. She was a freighter, rather old and tired after years of running taffeta and satin from Germany, hats and hemp to Norway, wine and cognac from France. Thanks to the wine, she was a "sweet ship," her holds full of pleasant odours. But otherwise, riding high beside her pier on the Thames that mild June day in 1620, she was no different from a hundred other square-riggers in the bustling Port of London.

Two men walked down the crowded quay, and one called out to a seaman repairing sails on the sunny deck:

"Ahoy there! *Mayflower* of London?"

"Aye."

"Captain Christopher Jones?"

"Aye."

They were necessary questions, for the ship had a common name; at least 20 *Mayflowers* are recorded in the port records of the era. Captain Jones invited the two men aboard, and in his comfortable "Great Cabin" they introduced themselves. Robert Cushman, a quiet, nervous man with wary eyes, described himself as a wool comber. His companion, a bluff hearty Londoner named Thomas Weston, did most of the talking.

A born promoter, Weston told Captain Jones that he and some London friends were setting up a stock company to finance a new "plantation" in America. Cushman

was acting as a representative for the colonists—a group of English religious exiles who had been living in Holland. The company had recently obtained a royal patent for a tract of land on the American coast. All that was needed now was a ship. Would Captain Jones be interested?

Christopher Jones was 50 years old, a steady, respectable businessman with a wife and two children ashore. With a quarter interest in the *Mayflower* to guarantee his prosperity, he might well have thought twice about making a journey across the vast, treacherous Atlantic.

But for years Captain Jones had been hearing and reading stories about America. Almost every month a new book appeared by some captain or ship's surgeon, describing the wonders of the new coasts. And when Jones went to the theatre he was likely to see such characters as Caliban, that strange native of the New World in Shakespeare's *The Tempest*, or Captain Seagul in Chapman's *Eastward Hoe* who told wild tales of rubies and diamonds on the American seashore.

It all made the life of a merchant seaman seem pretty tame. In his younger days, Captain Jones had hunted whales off Greenland. Why not one more daring voyage, before old age crept up?

There was soon some hard bargaining in the Great Cabin. A going rate per passenger—about the equivalent of a tourist-class transatlantic fare today—was agreed. The shippers were not to supply food, however; the colonists would carry their own. Jones insisted on the right to charge by the day if he were forced to linger on the American coast after the passengers disembarked. This point was accepted, and the three men at last agreed on a price.

The final contracts were signed in the next few days. Cushman told the captain that the exiles would leave Holland in another ship, the *Speedwell*, which would accompany the *Mayflower* and remain in the New World. The two ships were to rendezvous for the start of the voyage at Southampton in mid-July—little more than a month away.

The Exiles

On the surface, the hiring of the *Mayflower* might have seemed to be a routine business transaction. If Captain Jones had known all the dangers it involved, however, he would almost certainly have had second thoughts about the agreement.

Despite the royal patent, the exiles in Holland were all still subject to arrest at the king's whim the moment they reached England. Far more alarming to Captain Jones would have been the news that one of his first passengers would be smuggled aboard the *Mayflower* in disguise, because he was a fugitive for whom King James had been

ransacking England and Holland for more than a year.

Such royal manhunts were by no means uncommon at the time. England in 1620 was an uneasy nation, racked by grave social and religious schisms. King James was draining the treasury with his extravagance, while shocking the country with his moral laxity. For the past century, too, the writings of Martin Luther and the ensuing Protestant Reformation had fired men's minds with the ideal of increased personal independence. No nation had taken to the new concept of freedom more eagerly than England, but the king resisted and embittered those who yearned for religious liberty.

Two reactions ensued. From secret printing presses, books and tracts poured across the country, urging reform in the Church of England as the first step towards reforming a corrupt crown.

The second reaction went a step further. There were those who despaired of reform altogether and called instead for complete separation from the Church of England and the right to worship as their consciences directed.

This was far more dangerous doctrine. If a man were free to choose his religion one day, the next he might feel free to choose his king! So against these "Separatists" the royal fury was unchecked. Sheriffs, constables and bailiffs were ordered to "harry them out of the land."

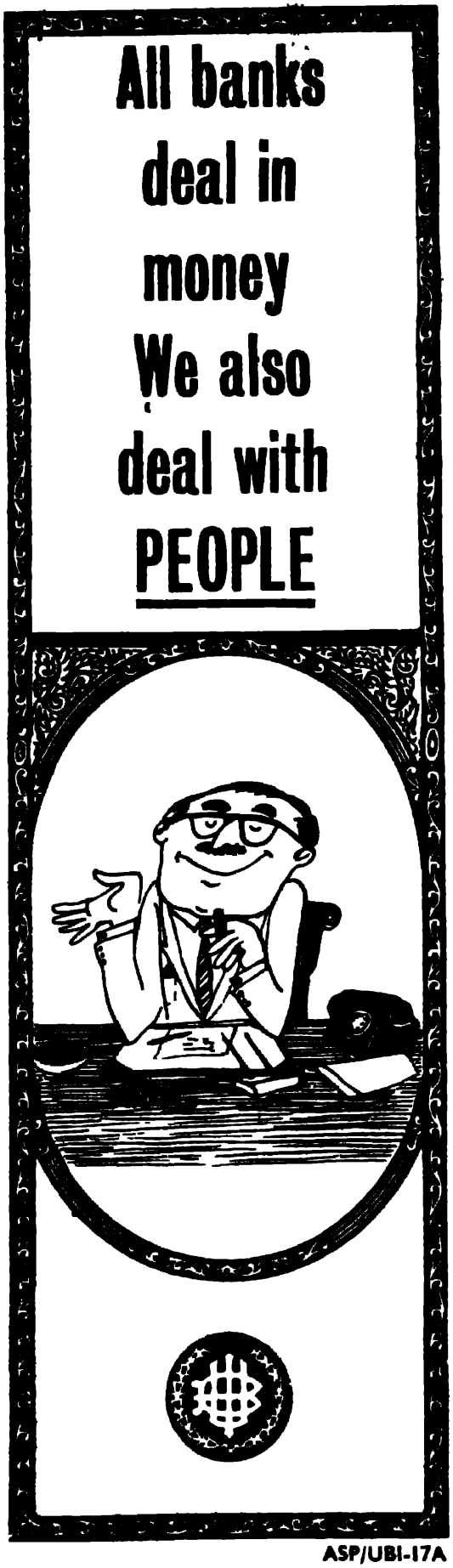
The group of religious exiles to whom Captain Jones had chartered the *Mayflower* had been harried out of England in compliance with this decree.

They had begun meeting some years before at Scrooby, in Nottinghamshire, holding secret services under the guidance of William Brewster, a bailiff and keeper of the King's Post. When spies and informers of the local bishop began to hound their meetings, they had agreed to go into exile. One by one they gave up their jobs and left their comfortable homes to settle in Holland, where religious freedom flourished.

The 11 years they had spent in their new home had not been easy. Country people used to living off the land, they had patiently learnt how to toil as spinners, weavers and twine makers in the factories of Leyden, the centre of Holland's world-famous cloth industry. But William Bradford, a young weaver who was to become one of their leaders, wrote that they had at last found "peace and spiritual comfort," which they valued "above any riches."

Why then had they decided to leave this peaceful city, with its lovely waterways, sunlit squares and scrupulously neat streets?

There were many reasons. Years before, during the war of Holland's liberation from Spain, Leyden had undergone a savage siege in which 8,000 inhabitants had died of starvation or disease, and now a new war



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loomed between the two nations. The Dutch, eager to have England as an ally, might be forced to placate King James by suppressing the refugee church. Then, too, the Dutch way of life was attractive and easy-going, so much so that the refugees feared their children might be tempted to adopt it, abandoning their English heritage and their religious dedication as well. There was also the exile's longing to stand upon a piece of soil and say, "This is mine."

And so, despite dire predictions of famine, sickness and torture at the hands of savage Red Indians, the decision was taken to establish a colony in the New World.

Three years of dangerous diplomacy followed the congregation's decision. In England, Brewster and others negotiated through influential friends for a royal land grant. At one point, King James sent agents to arrest Brewster, who had published a book attacking the king's religious policies. Brewster went into hiding (it was he who would be smuggled aboard the *Mayflower*), knowing what would happen if he were caught. For a similar offence a Scottish minister had been fined heavily, whipped and pilloried twice, had one ear cut off, his nose slit, his face branded with the letters S S. (Stirrer of Sedition)—and then been imprisoned for life!

But at last the king was persuaded to grant the patent—not to the congregation itself, but to its

financial backers, Thomas Weston's stock company. The news was quickly sent to Holland, where some final, heartbreaking decisions now had to be made.

A few married men chose to make the voyage alone. Some elected to take their wives, but to leave certain children behind. Others brought their entire families. In the end 16 men, 11 women and 19 children boarded the canal boats that would take them to the *Speedwell* and thence to the rendezvous at Southampton.

It was a poignant moment as the boats glided away from Leyden. It seemed a deep and wonderful thing to them, this long journey towards an unmapped wilderness 3,000 miles away. There were echoes in it of Moses and the God who had led His people to another wilderness. Certainly nothing but the deepest faith could explain what they were attempting.

As Leyden receded in the distance, many turned for a last look at its lofty spires, and the pangs of their parting still live in William Bradford's words:

"And so they left that good and pleasant city, which had been their resting place near 12 years; but they knew they were pilgrims, and lifted up their eyes to the heavens, their dearest country, and quieted their spirits."

When the *Speedwell* docked beside the brown-and-gold *Mayflower* in Southampton harbour, there was

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an excited, happy reunion between the exiles and their leaders who had spent such difficult years in England. But these joyous greetings soon turned to consternation as the Leyden men faced some grim and unexpected facts of life.

Strangers and Bad News

To START with, they discovered that there were already more than 80 passengers on the *Mayflower*. These "strangers," as the exiles called them, had been recruited by Thomas Weston and his London associates to make up the colony's quota. Also on board were a number of hired hands and servants, including six children who had been picked from the hundreds of orphans roaming the streets of London.

It was a shock for the exiles to find themselves outnumbered by so many strangers, but worse news was to follow. First there were long delays, caused by a dispute with Thomas Weston over the final terms of the colonists' contract with the London backers. When Weston refused to advance any more money, the exiles were forced to sell precious supplies to settle their debts with various merchants.

Despite these difficulties, the colonists were now as ready as they would ever be. On August 5, the *Mayflower* and the *Speedwell* made their way out of Southampton into the Channel, their holds filled with huge barrels of water, beer, biscuits and cod, sacks of smoked beef and tubs of pickled eggs.

Now, however, came an almost crushing blow. Shortly after the two ships sailed, the *Speedwell* began leaking badly. She turned back for repairs in Dartmouth and then made a second start, but when the ships had crossed almost 300 miles of ocean, the *Speedwell's* distress flag ran up again. This time they returned to Plymouth, where expert shipwrights reported that the ship was unseaworthy and would have to be abandoned.

This was catastrophic news. All previous colonizing expeditions had sailed in groups of two or more ships. Now, if they were to proceed at all, the voyagers would have to face the treacherous Atlantic on the *Mayflower* alone. Moreover, the *Speedwell* had been the cornerstone of their plans for fishing and trading. Without her, hopes of large profits dwindled. The colony would be isolated, with no way to get messages to England if supplies ran short.

The exiles held a conference with Captain Jones. He was confident, he said, that the *Mayflower* could make the crossing alone. Then, after hours of prayer and meditation, the voyagers reached the courageous decision: they would go forward.

Supplies were lugged from the *Speedwell* to the *Mayflower* while Jones calculated the passengers he could take from the crippled ship.



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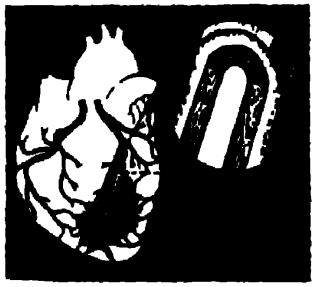


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Twenty of the strangers had to be left behind, but it was not difficult to find volunteers; seasickness and forebodings of disaster had taken their toll. And so at last, on September 6, with 102 passengers "all being compact in one ship," as William Bradford wrote, "they put to sea again."

Storm at Sea

A "fine small gale" sent the *Mayflower* bounding out into the North Atlantic. For Captain Jones, the winds were a welcome gift, but most of the passengers promptly became seasick—much to the crew's disgust.

Friction between the sailors and voyagers developed from the first day at sea. As the seamen leaped to trim a sail or handle the ship's network of lines, they did not relish bumping into a gawking female or tripping over one of the 34 children who raced up and down the decks. But the crew's hostility went deeper than mere contempt for clumsy landlubbers.

The average sailor of the day was an illiterate, profane brawler, fond of saying that "a man who went to sea for pleasure would be likely to go to hell for pastime." When the *Mayflower's* crew learned that the passengers were religious—each morning the exiles gathered on deck to sing psalms—they were outraged. Psalms and sermons were just the kind of thing they had gone to sea to escape. It was a positive affront to find piety pursuing them here on the ocean!

Soon muttered complaints about "glib-gabbety puke-stockings" grew into outspoken mockery. The seamen began bawling their worst profanities at the top of their lungs. One lusty young sailor, a champion at swearing, took special delight in taunting those who were seasick, telling them that he hoped to throw at least half of them overboard before the journey ended.

The *Mayflower* had been at sea



little more than two weeks when this blasphemous young man was stricken with a sudden illness; when he died, raving and cursing to the last breath, the other sailors were astonished. Superstitious to a man, they began to wonder if these humble psalm-singers might not be specially favoured by God. For the rest of the voyage the passengers were left in peace.

By now, most of the company

had their sea legs and were settling down to the cramped monotony of shipboard life. The tiny 113-foot *Mayflower* was able to carry—in addition to Captain Jones, his 30 seamen and 102 passengers—four quartermasters, three master's mates, a ship's carpenter, a doctor, a cook, and gunners to man the ship's ten cannon.

No one knows exactly how the voyagers were arranged, but historians believe that Captain Jones and his mates bunked in the poop house, giving up their cabins to the passengers. Most of the married couples, the unmarried girls and youngest children probably lived in these officers' cabins, while the single men and grown boys stayed on the gun deck, just above the ship's deep hold.

The lack of privacy and crowded quarters must have been painful, but these problems were over-shadowed by the unpalatable food—typical of ships of the time. The basic diet was cold fish or meat, pickled in brine, and served with beer and saucer-size biscuits. The women may have occasionally made stew or soup, a welcome treat because it gave the diners something to soften the biscuits, which became as hard as cannonballs. The food was made even more unappetizing by the deposits of rats, or the presence of a multitude of grubs, weevils and maggots.

For the exiles from Leyden, however, the overcrowded conditions and wretched food were of less concern than the future organization of their colony. Acutely aware that they were now a minority—a mere 27 adults—they knew they would have to find allies among the strangers if they were to retain control of the group and establish the kind of commonwealth they envisaged. Thus a good part of the first weeks was spent in cautious attempts to get acquainted with their new companions.

Two men immediately impressed the exiles. One was a fair-haired, husky, 21-year-old cooper named John Alden. By royal command, every ship clearing an English port had to have a cooper aboard to keep the barrels of beer and water tight. If the *Mayflower* left any barrels in the New World, it was up to Alden to hammer together an equal number for the return trip so that England would not be shortchanged in precious wood.

The other man was Miles Standish, a short, redheaded former captain in Queen Elizabeth's army who had been signed on to handle the colony's defences. As soon as the first bouts with seasickness were over, Standish began drilling squads of men, teaching them how to handle the swords and matchlock muskets which had been bought for the expedition. Although he stood little more than five feet tall, Standish was a born leader who easily kept discipline among the men.

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mean more rapid progress,
especially in an economy like India's.

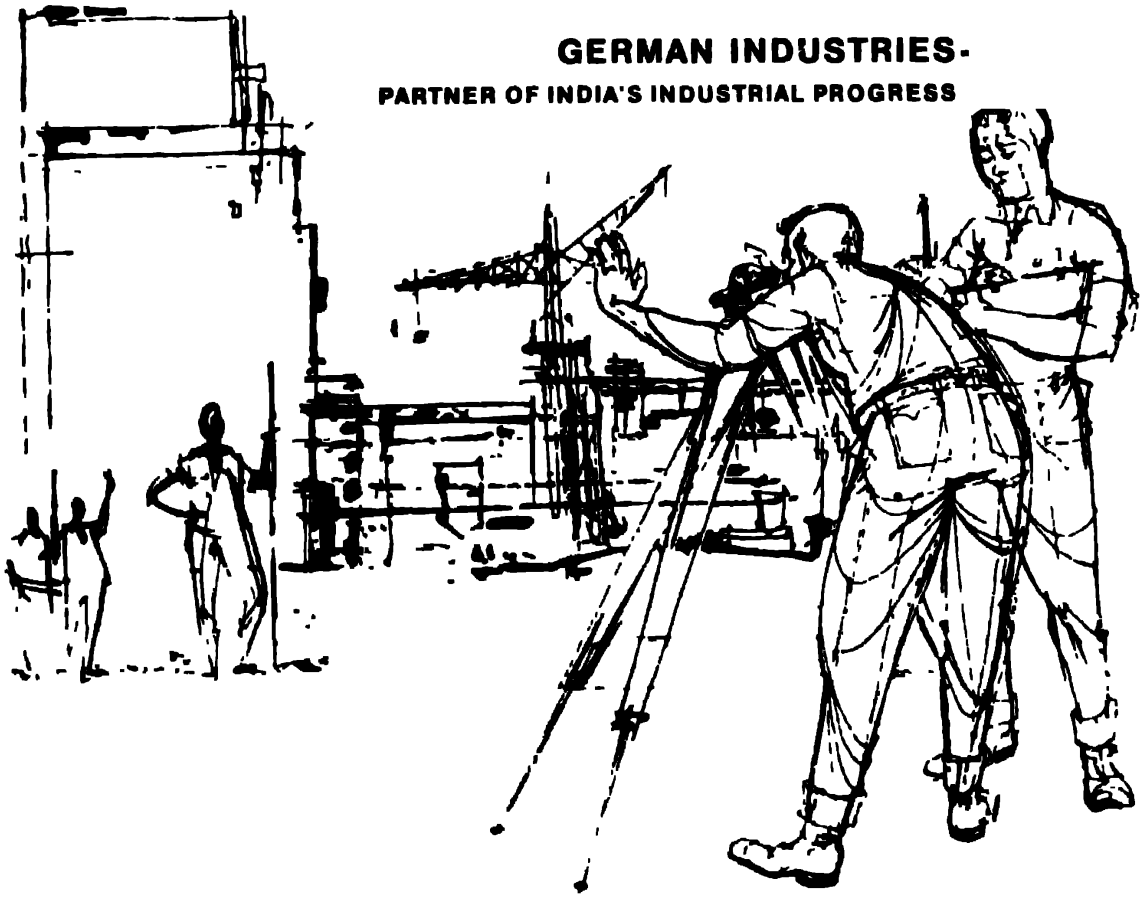
Large projects must be carried out, industries must develop fast—for the speedy economic growth India needs.

This means there must be more qualified men.
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last for long. Each day Captain Jones scanned the north-west horizon, grimly watching for the heavy weather that could be expected when the autumn "westerlies" roared down from Greenland. And then it came—the cold breath of the Arctic, tearing down the long reach of white capped sea.

"All hands, all hands!" roared the boatswain's mate. In the bitter rain, seamen climbed up the swaying masts and began to reef the sails, 60 feet above the heaving ocean. Suddenly a terrific shudder ran through the ship. She was "hawse full"—water pouring off her waist and streaming through the forecastle. Hatches were secured and portholes bolted tight as the waves —some as high as 50 feet—stormed over every inch of the *Mayflower's* decks. Now there was nothing the captain could do but "hull"—let the ship run before the wind with bare masts, even though it was being driven many miles off course.

Still the waves came, great smashing blows of the Atlantic's inexhaustible fists. Belowdecks, the frightened passengers huddled together and prayed. With every wave, freezing water cascaded down upon them, for the pounding seas had opened seams in the ship's upper works. In the foul semi-darkness someone suggested a psalm, and they began to sing.



But another monstrous wave boomed down, and with a tremendous crash a main beam amidships cracked and buckled.

Now there was pandemonium. The captain and mates rushed to the gun deck to stare at the sagging beam and the splintered deck around it. Water gushed through new openings, and the terrified passengers pressed against the walls to escape it.

The carpenter was summoned. Nothing would save the ship, he said, unless that beam could be forced back into place. The strongest men aboard—John Alden and half a dozen others—put their shoulders to the job, but the massive beam only sagged a little more.

Then someone remembered a "great iron screw" the exiles had bought in Holland to help raise houses in the New World. Sailors went scrambling into the hold, flinging aside tumbled boxes and bales until they found the gleam of metal in the flickering lantern light. They lugged the screw up to the deck and placed it under the cracked timber. Slowly, twisting the crank, they raised the beam into place, and reinforced it with braces.

But how long would the repair job last? "There was great distraction and difference of opinion amongst the mariners themselves," wrote Bradford. Alarmed,



Brewster, Bradford and John Carver, another of the congregation's leaders, sought out Captain Jones, and asked him bluntly if they were in serious danger.

Christopher Jones answered with proud confidence in his ship. He had seen the *Mayflower* through bad weather before, he said. If they did not strain things with too much sail, he was still ready to swear by her. They would sail on.

"So they committed themselves to the will of God," Bradford wrote, "and resolved to proceed." The sails were hoisted, and the ship headed again for the New World. But the Atlantic had not finished with them yet. For days and still more days, the *Mayflower* wallowed through mountainous seas. Even with lifelines strung, the crew had to watch the water or go overboard.

By now the passengers had been living in the foul darkness belowdecks for weeks—a hundred people crowded into a space not much roomier than a small house. They had been unable to change their clothes or wash for over two months. Sanitary facilities were simply buckets. The food was getting worse every day. The biscuits had to be pounded to pieces with a chisel; the grain had more and more crawling things in it.

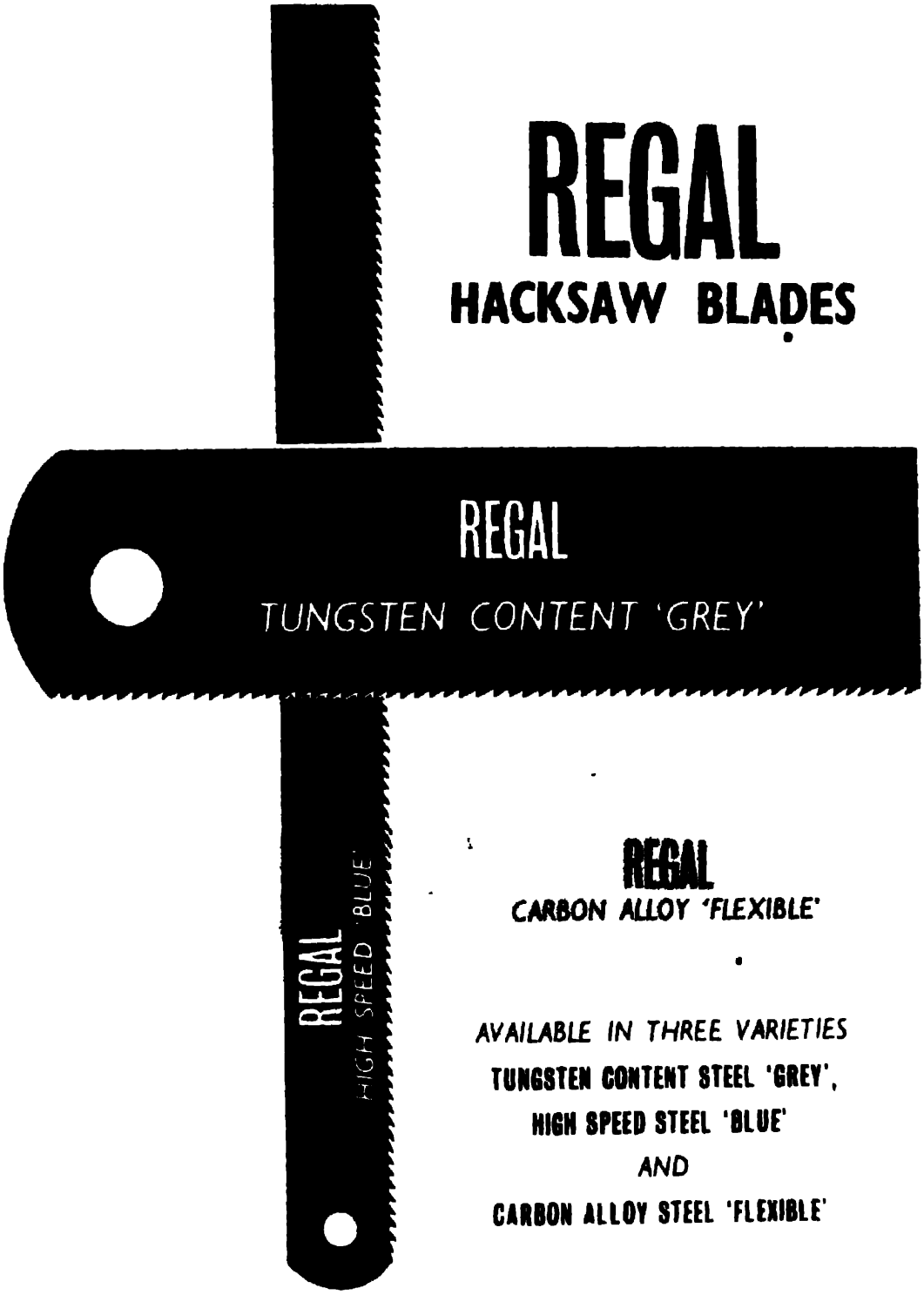
For the younger men, the confinement belowdecks was almost intolerable. One of them, John Howland, could stand it no longer. He shoved open a hatch grate and stepped out on deck. But he hardly had time to catch a breath of clean air when the ship suddenly heeled over. Seconds later, Howland was in the foaming, frigid Atlantic.

The seamen of the *Mayflower* may have been a blasphemous, brawling lot, but they knew their jobs. Luckily the ship had rolled so far that her topsail halyards (hoisting ropes) were trailing in the water, and just before Howland was swept under the wild waves his clawing hands found one. Now a team of deck hands leapt to the halyard and hauled him to the surface, and as the sea flung him back and forth like a piece of bait on a line, the crew shouted encouragement. Then a sailor, with a rope around his waist, teetered over the side of the ship with a boathook in his hand. One pass, two—and up on deck came John Howland like a large flounder.

After Howland's narrow escape, no one felt like venturing on deck. The Atlantic raged on, and the miserable passengers did their best to endure it.

But now came a new crisis—cries of pain from the Great Cabin. Elizabeth Hopkins, one of the strangers, was in labour. Neither she nor her husband, Stephen Hopkins, had ever expected to have their child during an Atlantic gale and at William Brewster's suggestion the exiles and strangers knelt together in prayer for a safe delivery. Soon afterwards there was good news—

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a lusty, yowling baby boy had been born. Stephen Hopkins promptly named him Oceanus.

The birth cheered everyone until, as the tenth week drew to a close, William Butten, a 22-year-old servant, fell ill. It was the first case of scurvy, and it was fatal. The sailors sewed the body in a shroud, and sent it plunging into the sea.

Below decks, there were ominous signs of more disease. Men and women were complaining of swollen legs, chills and fever. Fortunately the weather at last began to clear. Hatches were opened and, on the captain's advice, even those who were ill were sent on deck to take some exercise.

Now an air of expectancy raced through the ship; Captain Jones had reported that landfall could come at any time. Aloft in the crow's-nest a lookout peered endlessly over the western horizon, but he saw nothing except miles of trackless ocean. Another day passed. Would the voyage ever end?

On the morning of November 9 the crew plodded through their duties, as Captain Jones watched the dawn grow on the glistening sea. Above, the sails flapped in a dying wind. Mate John Clark pointed to the changing colour of the water—indigo blue had turned to emerald. That meant land was close, and the captain ordered the leadsman to take soundings. In a few moments the hiss and plop of the leadline was followed by the excited bellow: "Bottom at 80 fathoms, sir!"

It was there 480 feet beneath the ship's keel—the continent of North America, reaching out into the sea to welcome them. Now the sun made the *Mayflower's* worn sails gleam as if they were woven with gold, and a breath of wind came on the spreading light. Then from the maintop lookout burst the cry that passengers and crew had been hearing in their dreams for weeks.

"La-and Ho! La-and Ho!"

The First Pledge of Allegiance

THERE WERE shouts of joy and tears of relief. Many fell on their knees and thanked God with simple spontaneity. But the rejoicing was brief. After consulting his charts, Captain Jones reported that the long, low, sand-covered shore they were approaching was part of that great arm of land known as Cape Cod.

This was disappointing news. Cape Cod was not where the king had designated their plantation. Their grant permitted them to settle only at the mouth of the Hudson River, within the territories controlled by the Virginia Company. Gritting their teeth, the passengers resigned themselves to another day or two aboard the *Mayflower* and set sail for the Hudson.

But within hours they were forced to reconsider this decision. As the *Mayflower* headed south, she was swept into a long, threatening

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stretch of white breakers. It was shoal water, and it took hours of tense manoeuvring, and all of Captain Jones's expert seamanship, to keep the *Mayflower* from grounding on the deadly shoal.

When they were safe in open sea again, the passengers held another conference. If the uncharted waters contained shoals like this, it might take them weeks to reach the Hudson River. Perhaps it would be wiser to settle here, on the New England coast, and waste no more of these precious days on the edge of winter.

Far into the night, the leaders from Leyden and London debated the issue, and agreed to risk remaining in New England. The following morning they announced their decision and promptly faced the threat of mutiny!

The younger men—bonded servants, hired hands and some of the strangers—greeted the news as a call to revolt. If they were going to land on a shore where they had no right to go, they said, then the leaders no longer had any right to control them.

This was a genuinely alarming development. The leaders of the expedition knew they would need every able-bodied man if they were going to get up shelter before the snow began to fall. All that day they discussed the crisis in the Great Cabin. Instinctively they shied away from any use of force—although Miles Standish growled that he was

sure he could handle any resistance.

Just before they left England, the exiles had received a farewell letter from John Robinson, their beloved pastor who remained in Holland. Robinson had told them that they were to become a "body politic" in the New World—and the leaders now decided to act upon his words. William Brewster and Stephen Hopkins were given the assignment to draw up a brief "compact," and while the *Mayflower* worked her way slowly round the tip of Cape Cod, the two men laboured over a document that would one day be hailed as a landmark in the world's long struggle for freedom and dignity.

IN THE NAME OF GOD, AMEN

We whose names are underwritten, the loyal subjects of our dread Sovereign Lord King James by the Grace of God of Great Britain, France, Ireland, King, Defender of the Faith, etc.

Having undertaken, for the Glory of God and advancement of The Christian Faith and Honour of our King and Country, a voyage to plant the First Colony in the Northern Parts of Virginia, do by these presents solemnly and mutually in the presence of God and one of another, covenant and combine ourselves together into a Civil Body Politic for our better ordering and preservation and furtherance of the ends aforesaid, and by virtue hereof to enact, constitute and frame such just and equal laws, ordinances, acts,



constitutions and offices from time to time as shall be thought most meet and convenient for the general good of the Colony, unto which we promise all due submission and obedience.

The passengers, including the would-be mutineers, were assembled belowdecks. When they learned about the Compact, all the men signed it except a few who were probably ill, and 13 young men whose allegiance was covered by their fathers' signatures. The Compact had been a masterful solution to the threatened revolt.

Now only one piece of business remained—the election of a governor. Without opposition, John Carver was chosen to serve for one year. Relieved and full of hope, the leaders joined the others as they trooped above for a closer look at the New World.

Treasure in the Earth

"ALL THINGS stand upon them with a weather-beaten face, and the whole country, full of woods and thickets, represented a wild and savage hue."

William Bradford's sombre words described the land which the voyagers were now so eager to explore. The *Mayflower's* firewood was exhausted, and so a party of men took off in the ship's longboat and started for the shore. Sandbars prevented them from landing on the beach, and they were forced to wade through three feet of water—a chilling experience in early November. But the exultation of touching solid earth was so great that no one minded.

The men had landed where Provincetown now is, on the very tip of the Cape. They quickly marched into the forest, where they cut down a large supply of sweet-smelling juniper. When they returned to the ship, the *Mayflower's* lower decks were soon filled with this wilderness incense, and the passengers enjoyed their first hot meal for weeks.

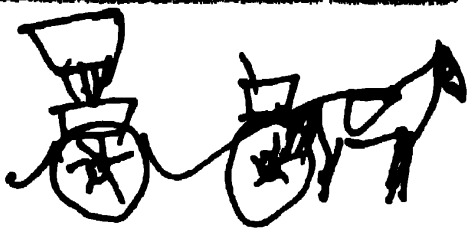
No fresh water had been found in the woods, which discouraged any thought of establishing the colony there, and the men were anxious to search further. To help them move quickly along the coastal waters, they had brought a ten-ton shallop (an open boat), which had been divided into four sections and stored on the *Mayflower's* gun decks. But during the voyage the shallop's seams had opened, and the ship's carpenter reported that it would take weeks of repair before it was ready to sail.

The more adventuresome men declared it would be madness to wait. They wanted to explore the country on foot, and after some hesitation Governor Carver agreed to let 16 men leave, cautioning them to spend no longer than two days on the expedition.

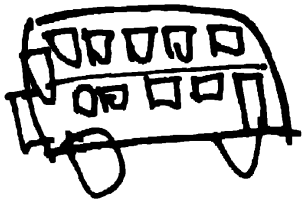
Equipped with helmets, swords, muskets and steel breastplates, the men were rowed ashore. With

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Miles Standish at their head, they lined up in single file and started down the beach. But when they had marched about a mile they suddenly stopped in surprise: in the distance they could see five or six figures coming towards them

Red Indians! Miles Standish spurred his explorers forward these men could tell them about the land, where to find fresh water and good harbours. But the Indians abruptly turned into the woods. Standish's men found their trail and followed it for miles, until nightfall forced them to make camp. They continued the search the next morning, but in bitter disappointment they eventually gave it up. The red men had vanished.

The men had now reached a valley of long grass and, following a little path, they came upon a strange sight—"certain heaps of sand," as Bradford described them. One was covered with a wooden arch.

Poking with their swords, the men dug up a bow and several arrows, which crumbled in their hands They quickly decided they had stumbled on a graveyard, and dug no more

But at the top of a nearby hill, someone noticed another mound of sand Struggling up the steep slope, the men saw that this one had been made recently—hand marks remained where the sand had been smoothed. At Standish's order, three men started to dig, and they soon uncovered a basket full of maize. Excited, they dug further and brought up a huge basket filled with "very fair corn, some yellow, some red and others mixed with blue."

It was a vitally important discovery. The voyagers had brought along seeds of wheat and barley, but they knew from reports of Virginia that the crop which grew best in the New World was maize. If their other grain failed, these kernels might mean the difference between life and death

But should they take it? After much discussion, they decided to carry off as much of the sweet corn as they could- but all agreed that as soon as they met the Red Indians they would explain what they had done, and 'satisfy them" for what they had taken

When the explorers returned to the *Mayflower*, the passengers listened to their report When they saw what had been found on the steep slope still called "Corn Hill" today -they were amazed. The farmers among them were astonished at the size of the kernels, which meant rich soil and good harvests to come.

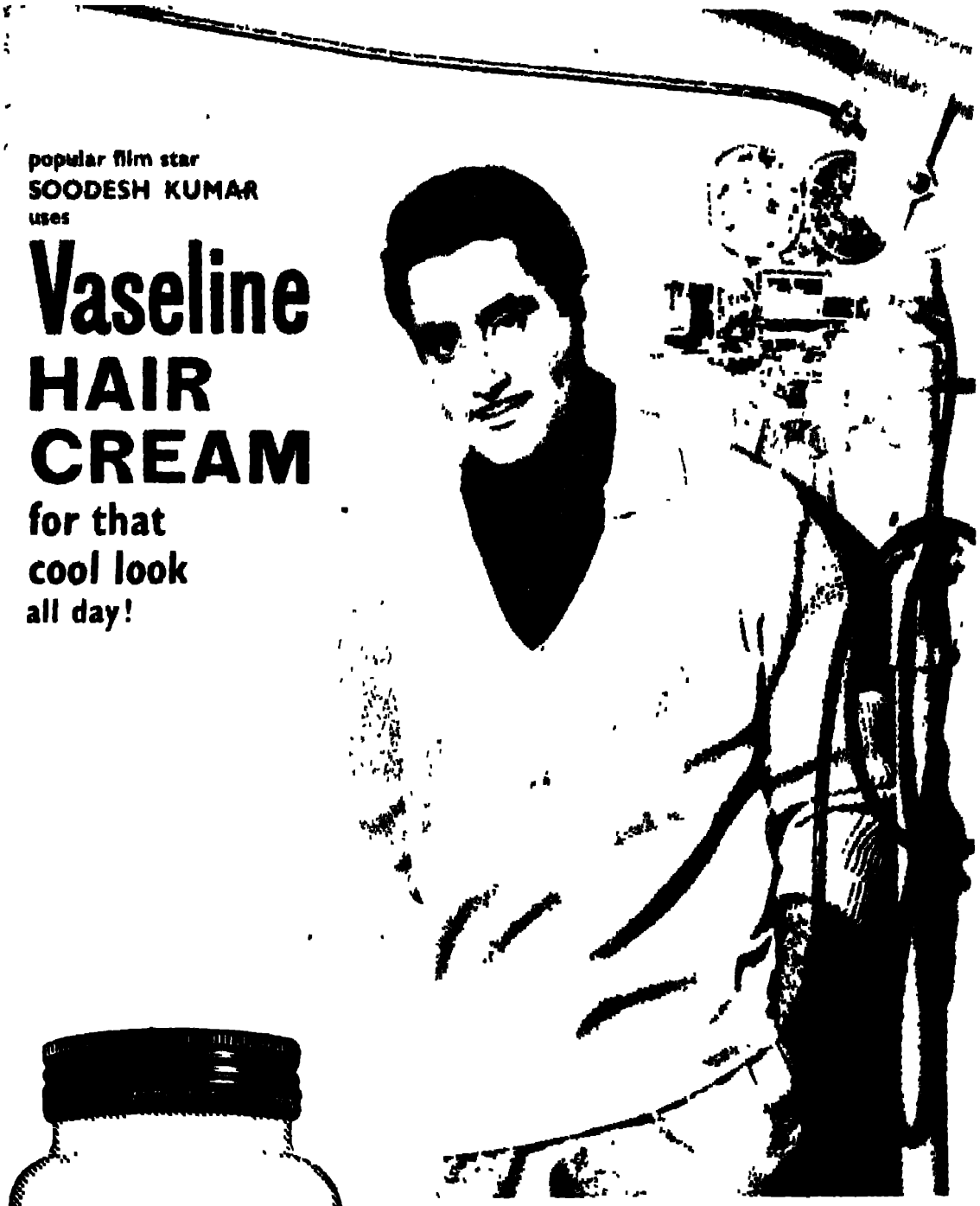
William Bradford spoke of the Israelites who had entered the Promised Land. They had sent 12 men exploring, who brought back the "fruit of the land."

The comparison was startling, and Bradford wrote that his friends were "marvellously glad and their hearts encouraged."

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By November 27, the shallop was ready to sail, and a second expedition set out. But on this trip the men were discouraged by the poor soil they found, and their failure to discover a protected harbour. Winter was upon them now. Snow flurries howled across the water, and when they returned to the *Mayflower,* a violent argument broke out.

Many of the passengers demanded that they settle where they were. Fresh water had been found at Corn Hill; there were deer, wild geese, duck and partridge in the woods. Moreover, whales had been sighted near the ship; in time they could make a fortune from the sea alone. Why look further?

Others, led by Bradford, strenuously disagreed. The fresh water around Corn Hill was in ponds; it might dry up in the summer. The decision to settle, they pointed out, was irrevocable. They had to build a fort and houses, the kind of things that could not be moved later. It would be folly to settle on a second-rate place, when an ideal site might be waiting only a few miles away.

Battle at the Barricade

AFTER A long debate, a compromise was reached. One last expedition could sail, but only within the limits of the bay where the *Mayflower* was anchored. The explorers now turned to Robert Coppin, the second mate, who had sailed this coast on a trip to Virginia a year before. Pointing to a bluff across the bay, Coppin said that he knew of a good harbour about 24 miles away. He and some sailors had named it "Thievish Harbour," after a Red Indian whom they had met there had stolen a harpoon.

On December 6, the explorers set off on their last expedition. The weather was foul. On the open water, a ferocious wind swept down on the shallop, drenching the men in freezing spray. "The water froze on our clothes and made them like coats of iron," wrote Bradford.

After sailing some 20 miles, they made for the nearest beach, where they would camp for the night, and as they drew close to the shore, they saw another group of Indians. Once again the red men disappeared into the woods, but that night, as the explorers shivered around their campfire, they saw another blaze many miles down the beach. It was the natives, and all night long the two fires glowed while the darkness remained an impassable gulf between them.

The white men spent another day of fruitless searching for their invisible companions. At one point, however, they made a puzzling discovery. In a huge clearing, they found an immense graveyard surrounded by a fence of saplings. Here, surely, was the site of a terrible disaster. Hundreds of bodies had been buried, and not far away stood untilled maize-fields and abandoned wigwams. What did it

mean? Wondering and disheartened, the men made camp again, building a small barricade and posting sentinels. During that night their sleep was disturbd by howling wolves. Then, just before dawn, the air was split by an ear-shattering scream.

"*Indians! Indians!*" cried a sentinel. At the same instant a barrage of arrows hissed out of the darkness and hit the barricade.

Some of the men had left their guns in the shallop, and they raced down the beach to get them. When the Red Indians ran to cut them off, a few of the white men with swords turned to meet the shock of their assault. This scuffling on the sands was quickly over; the men who reached the shallop fired their muskets, and the savages fled back to the woods.

But Miles Standish, Governor Carver, Bradford and the other men at the campsite were still under fierce attack. The barricade had only three sides: and the Indians poured clouds of arrows into the opening left on the fourth. Wisely, Standish ordered the men to hold their fire until the darkness lifted and they could make every bullet count.

The men waited, listening to the bloodcurdling whoops and howls of the savages. "*Woach! Ha! Ha! Woach!*" was how they sounded to Bradford. Then, as the dawn brightened, they could see the Indians moving back and forth through the forest. The besieged men began firing, and the Indian attack quickly dwindled. Standish had guessed that the savages would be awed by the muskets, and soon only one Indian —obviously the leader—remained close enough to do any real damage. "A lusty man, no wit less valiant," Bradford wrote, "he stood behind a tree within half a musket shot and let his arrows fly at us."

Finally, one of the explorers took careful aim at the warrior, and "made the bark and splinters of the tree fly about his ears." The savage gave a great cry and fled. Like so much smoke, the other Indians vanished with him, and the shaken explorers were left alone once more on the edge of the silent forest.

Miraculously, not a man among them was touched. Governor Carver immediately suggested a prayer, and all knelt in the sand to give thanks to God for their deliverance. Then after christening the beach "The First Encounter," a name it still possesses, they set sail again for Thievish Harbour.

The Landing at Plymouth

SNOW, RAIN and a mounting wind swept the sea. By mid afternoon the shallop was caught in a roaring gale, and under the pounding of the waves her rudder broke, forcing the men to steer with oars. Then a wild blast of wind tore at the sail, and with a sickening crack the mast split and went overboard.

It was dusk now, and the men

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rowed furiously, pulling for a harbour they could barely see through the gloom.

At last, groping in total darkness, they found calmer water and worked their way towards the shelter of some kind of land. They had no idea where they were.

"It froze hard," Bradford wrote of that night. Leaving the ice-encased boat, the men huddled about a fire on the beach. It was a moment of near despair. Almost a month had passed since they had reached the New World, and now everything—the crippled boat, the bitter weather and the hostile savages—seemed to point to disaster.

But as the dawn broke, the men were suddenly heartened. The weather had cleared, and in the brilliant winter sunshine they found that they were on an island which faced Thievish Harbour. Before them, across the waters, wooded hills glistening with snow formed a great amphitheatre around a bay.

They were looking at Plymouth. On a map made by Captain John Smith, of Jamestown, Virginia, six years earlier, the place had already been named—and its echoes of England and the port they had sailed from were reassuring. The men made a new mast for the shallop, and at dawn on December 11, they sailed across the quiet harbour towards the snow-cloaked shore.

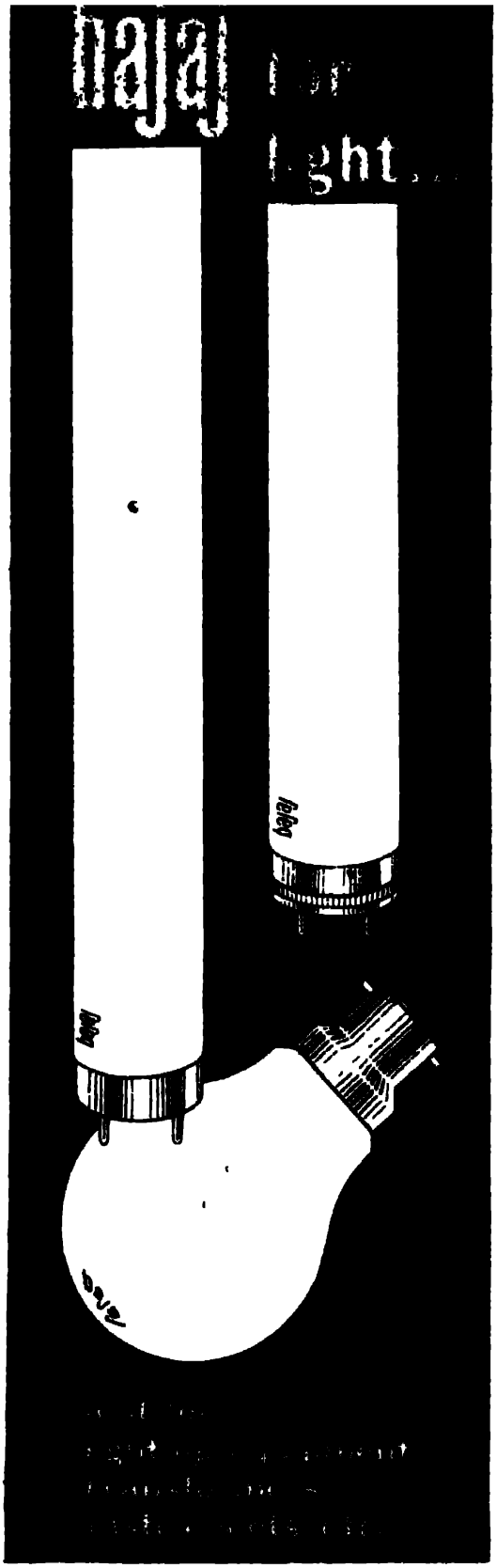
Under Miles Standish's stern orders, they lined up with muskets ready after going ashore and marched into the land. Almost immediately they liked what they saw. There were "diverse cornfields and little running brooks," reports Bradford. The fields, like the others they had seen, had been abandoned, and they quickly decided it was a fine place for a colony. "At least it was the best they could find, and the season and their present necessity made them glad to accept it."

With new vigour and excitement, the men boarded the shallop to bring the good news back to the *Mayflower:* they had found their home!

The First Main Street

ANY REMAINING doubts about the site of the colony were resolved a few days later when the *Mayflower* anchored in Plymouth Bay and the passengers could make a closer examination of the land. They found the soil excellent. Trees for lumber were abundant. Best of all, near the shore there was a great hill from which the voyagers could see far out to sea. Miles Standish recommended building a fort here which would command both the bay and the surrounding countryside.

Now everyone was eager to get ashore and begin building houses, but for days a bitter north-east storm forced them to wait. At last, on December 23, the work started. Every able-bodied man left the ship and began chopping down pine trees and sawing them into planks for their first dwelling, which was



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to be a large "common house."

The next day was a Sunday, and as anxious as the men were to continue working, they refused to violate their Sabbath. As they had every Sunday since reaching the New World, they spent the day in prayer and meditation. At first this custom had disturbed Captain Jones --it would delay the *Mayflower's* return to England. But by now the sailors had begun to admire these determined voyagers, who felt the presence of God was as important as shelter in the wilderness.

Strangely enough, Monday, December 25, was another working day. These earnest Christians could find no mention of the celebration of Christmas in the Bible, so they simply ignored it. But that night aboard the *Mayflower*, when the voyagers discovered the last of their beer was gone, Captain Jones brought out some of the ship's beer, and the sailors and passengers enjoyed a small party together.

Later in the week, the men laid out the measurements for New England's first main street. It was to run up the hill, with a row of houses on either side, ending at the fort on top. To save time and to keep the colony as compact as possible, unmarried men were to live with families. This reduced the number of needed houses to 19. There was a rough attempt to approximate the size of the plots to the size of families, and positions on the street were chosen by lot.

The homes the colonists built were frame houses consisting of one room with a fireplace, and a loft, reached by ladder, for sleeping. These small dwellings were not easy to build. Each required a solid foundation of stone, and the roofs were made of thatch, laboriously gathered from creek banks and miles of meadow. There was no glass for windows; oilpaper was used instead, and the joints and cracks in the walls were daubed with clay.

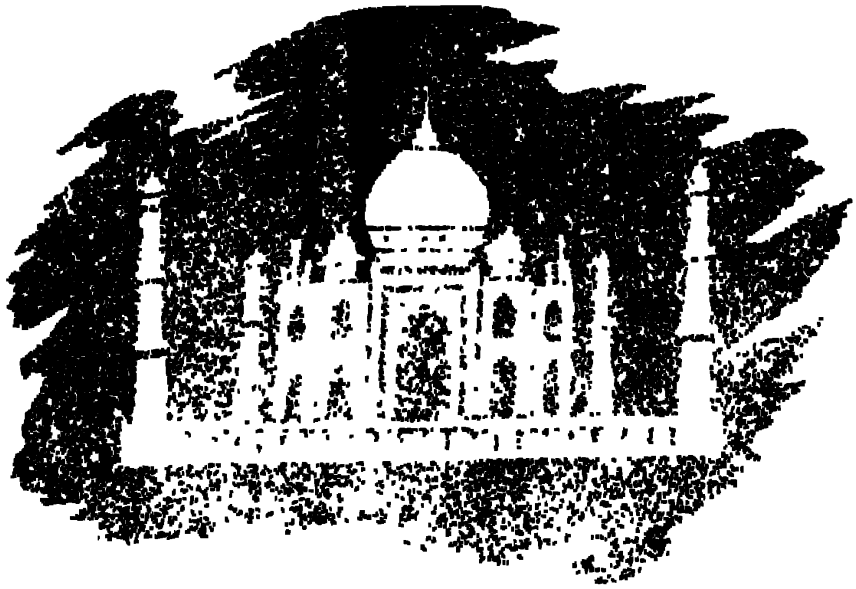
The work progressed steadily through the next weeks, and soon there was more than a hint of civilization on the barren shore. The large common house was completed, and several of the homes were half-finished. Then, towards the end of January, the work faltered and soon came to a complete stop. In the common house, aboard the *Mayflower* and in another small house set aside as an emergency hospital, men and women lay coughing and gasping for breath.

The "General Sickness" had come.

"You Show Your Love Like Christians"

THERE HAD been a few deaths since the *Mayflower's* landing, and dozens had suffered from colds and the early stages of scurvy. But now, in the worst of winter, a virus similar in many of its symptoms to influenza swept the weakened colonists in epidemic proportions. At times there were only six or seven







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people strong enough to stand on their feet, and men and women died at the rate of two or three a day.

It was a moment of supreme crisis for the little colony. Those who were well worked unceasingly for the sick. "With abundance of toil and hazard of their own health," says William Bradford, "they made them fires, dressed them meat, washed their loathsome clothes, clothed and unclothed them. In a word, did all the necessary offices which dainty and queasy stomachs cannot endure to hear named; and all this cheerfully . . ."

Miles Standish and William Brewster were among the most indefatigable nurses. It is easy enough to see William Brewster, the exiles' ruling elder, in the role of good Samaritan, but that Standish, the tough captain and veteran of wars, should also play the part was remarkable proof of how deep the spirit of brotherhood ran.

The epidemic soon swept through the *Mayflower's* crew, and the sick sailors who had known such camaraderie in scoffing and cursing at the passengers now found that their mates would not come near them. But the colonists who were still on board did what they could to help, and their charity made a profound impression. "You, I now see," cried the boatswain, "show your love like Christians indeed, but we let one another lie and die like dogs!"

The sickness was to rage for weeks, and the long death toll would continue until only half of the colonists remained alive. Several families were totally wiped out. Of the 18 wives, 13 died, and among the single men, 19 of 29. All were buried on a low hill just above the shore in shallow, unmarked graves, for the colonists were afraid that if the Red Indians saw how their numbers were dwindling, it would be an invitation to attack.

There had been a number of unnerving signs that Indians were near by. "Great smokes of fires" had been sighted, and at various times the colonists caught glimpses of the savages in the woods. Aware that any attack now would bring complete disaster, Miles Standish pressed forward with the construction of a fort. Although only a few men were able to work, a sturdy platform with emplacements for cannon was built, and on February 21 a group of sailors helped the colonists drag two big cannon up the hill. These powerful weapons, one weighing 1,200 pounds and the other 1,500, were securely placed in position along with two smaller cannon.

When the work was finished, Captain Standish strode back and forth on the platform with a satisfied air. From this vantage point, the guns could sweep the surrounding forests and harbour. Despite the General Sickness, Plymouth had taken a long stride towards survival.

Miles Standish called a conference in the common house on

March 16 to draw up a set of military orders for the defence of the colony. But the meeting had barely started when someone noticed a solitary Red Indian walk out of the woods, naked except for a fringe of leather about his waist.

While the white men stared in amazement, the tall, handsome savage came straight towards them, walking up their main street as casually as a Sunday stroller out for a promenade.

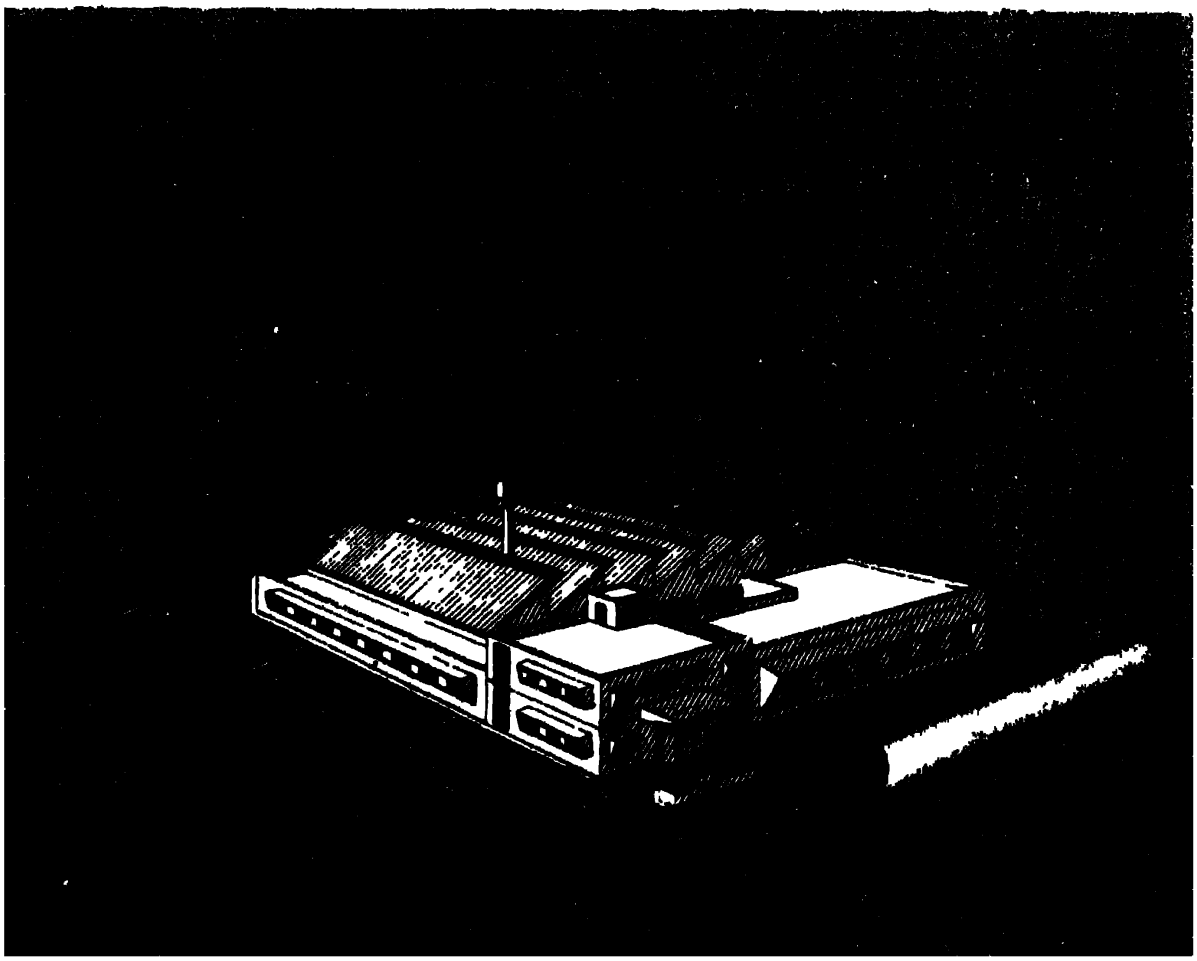
When he reached the door of the common house, there was an awkward pause. Then the Indian raised his hand.

"Welcome!" he said.

The colonists were struck dumb. After all these months of failing to communicate with the red men, here was one who could speak English! Eagerly they questioned him. His name was Samoset, the Indian told them, and he was an Algonkian chief who lived far to the north (Maine). He had learnt English from the white-skinned fishermen who had upon occasion visited his country.

Then the colonists asked him about Plymouth. Why were the maize-fields untilled? Where were the Indians?

Samoset gravely explained that there had lived a strong and numerous tribe—the Patuxets -but, four years before, a plague had killed



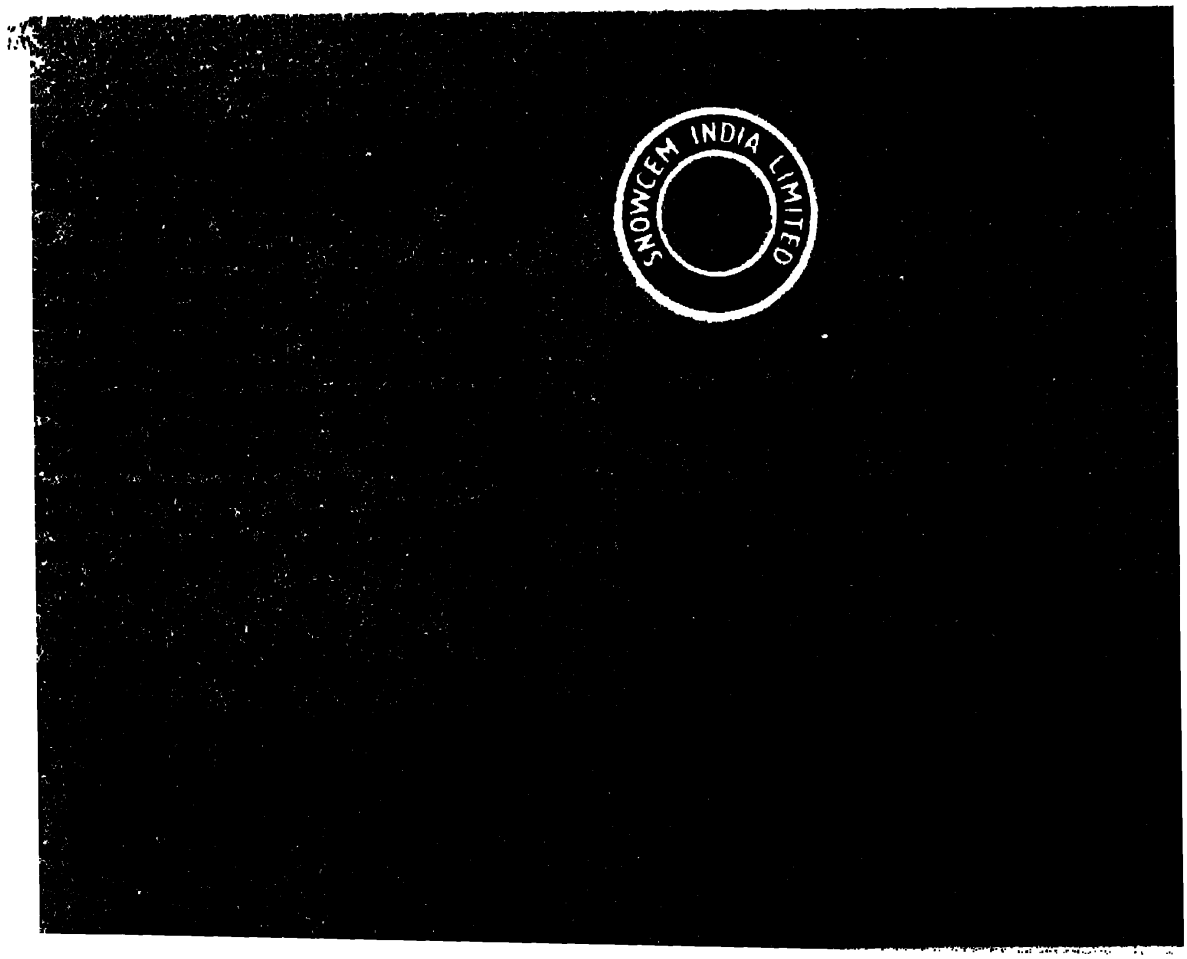
every man, woman and child. The other tribes now shunned the land, certain it was haunted by evil spirits.

Samoset also gave the colonists a clear picture of their Indian neighbours. The nearest were the Wampanoags, headed by Massasoit, a wise chief whose skilful diplomacy had made him the ruler of many smaller tribes. Out on Cape Cod were the Nausets; they were the savages who had attacked the colonists, and Samoset explained why. Years before, an English fisherman named Captain Hunt had lured 27 Indians aboard his boat and then sailed away. Later the tribes had learnt that he had sold his captives as slaves in Spain. Ever since that time the Nausets had hated the white man.

The meeting with Samoset was the start of a new era for the little settlement. The men of Plymouth were at last able to make contact with the Indians, and on March 22 they witnessed an awesome sight. The great chief Massasoit himself suddenly appeared on the crest of a near-by hill.

His face was dyed a deep mulberry and oiled, and he wore a large chain of white bone beads about his neck, his badge of office. Behind him stood 60 warriors, all painted with various colours.

Did they know that they outnumbered the white men two to one?





The colonists gripped their muskets, and held a hurried conference. Young Edward Winslow, a rising leader among the Leyden men, volunteered to act as an envoy; after buckling on his armour and sword, he bravely marched out of the settlement to meet Massasoit.

When he stood before the chief, Winslow presented a pair of knives, a copper chain with a jewel in it, a pot of brandy, and some biscuits and butter. Massasoit accepted the gifts in silence but with great dignity. Then Winslow made a brief speech, telling Massasoit that Governor Carver wished him to come to Plymouth to arrange a treaty of trade and peace.

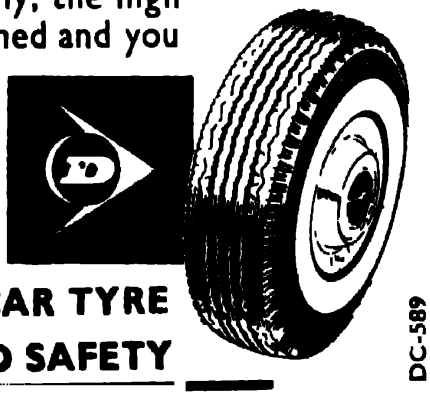
Solemnly, Massasoit ordered 20 of his warriors to leave their bows and arrows and accompany him. When the Indians reached the outskirts of the little town, they were met by half a dozen musketeers who acted as a guard of honour. Determined to impress the Indians with all the military pomp and bravado his handful of soldiers could muster, Miles Standish staged a masterful performance. The musketeers led the chief and his warriors to an unfinished house. Then Governor Carver appeared—preceded by a drum and a trumpet and still another small guard of honour.

Governor Carver kissed Massasoit's hand, and the chief returned the compliment. Brandy and fresh meat were served; and, after eating,



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Massasoit lighted a pipe, took some puffs and passed it to the white men. Then they began to discuss a treaty of peace. With no difficulty, they worked out a mutual-assistance pact, which remains a model of its kind. Two of the most important clauses declared:

> That when their men came to us, they should leave their bows and arrows behind them; as we should do our pieces when we came to them.
>
> If any did unjustly war against him, we would aid him. If any did war against us, he should aid us.

The treaty would remain unbroken, its pledges fulfilled by both sides, for more than 40 years. Its power was evident from the beginning, for in the next few weeks, as Indians and white men met in the woods, there was no sign of any hostility, and the spirit of trust between the two peoples steadily increased.

The Mayflower Sails Home

ACCORDING to the old Julian calendar, which the colonists followed, March 25 was the beginning of the New Year. Two days earlier, Governor Carver had been re-elected, and shortly afterwards he made the first major decision of his new term. He let the *Mayflower* sail for England.

By now, enough homes had been completed to enable the remaining few colonists to live on the land. The peace treaty with Massasoit had reduced the danger from Indians. The General Sickness still continued, but its virulence was diminishing, and the survivors were beginning to regain their strength. The weather was improving, too, and several families had already planted garden seeds around their homes.

For his part, Captain Jones was eager to sail. Even now, he was leaving ten of his best men in the graveyard above the harbour, and he could not afford to stay any longer without risking a starvation voyage home.

But the captain and the colonists were to part in friendship. Despite the privations of the voyage, the original hostility of the crew and the sickness that had caused such tragedy, a deep and enduring respect had grown between Christopher Jones and the men and women he had brought to America.

Now that winter had passed, the crossing would be easier and the *Mayflower* was to reach England in only four weeks. Within the year Captain Jones was dead, weakened, many think, by the hardships and exposure he endured while helping the colonists explore the shores of Cape Cod and Plymouth harbour. In another year the *Mayflower* would be nothing but a mouldering wreck in a nautical boneyard, sold for little more than the value of her sails and rigging.

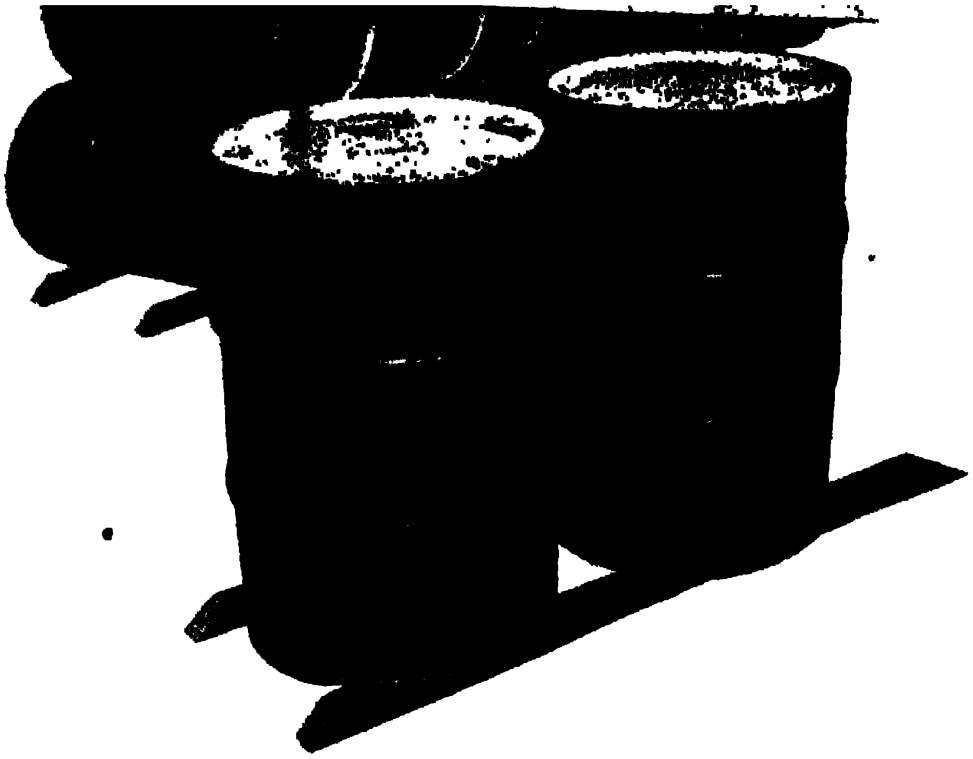
But on April 5, 1621, as she stood out of Plymouth harbour, the old



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freighter meant only one thing to those who gathered on the shore to watch her: their last link with England, their last refuge, was going. Not once in the previous history of English colonization had a ship sailed for home without a scramble among the fainthearted for passage aboard her. But although many men and women wept unashamedly as the *Mayflower* headed out to sea, all remained at Plymouth.

In one great moment of decision, exiles and strangers had become Pilgrims all—their minds and hearts strengthened by common suffering and common courage into a resolution no other group of colonists had ever known.

Founders of a Nation

SHORTLY before the *Mayflower* sailed, the colonists had met another English-speaking Red Indian. He was called Squanto, and he was soon to become the Pilgrims' best friend in the New World.

Squanto had led a fantastic life. Even before the colonists had hired the *Mayflower,* he had crossed the Atlantic four times. He had sailed to England in 1605 aboard an English fishing boat, and made the return trip with none other than the explorer, Captain John Smith. Then, some years later, he had been one of the 27 Indians kidnapped by Captain Hunt.

Squanto had been sold as a slave in Spain, but he had the good fortune to fall into the hands of some friars who wanted to convert him. Eventually he made his way to England again, where he embarked for his native land. But this time when he reached Plymouth, he found that his entire tribe had been wiped out by plague. Squanto was now the last surviving member of the Patuxets.

To the colonists, it soon became clear that this resourceful Indian was "a special instrument of God for their good." Early in April, when they began to prepare for spring planting, Squanto gave them a crucial warning. Unless they fertilized their maize ground with fish, he said, the crop would come to nothing.

This caused consternation. By now the colonists had learnt from bitter experience that the fish hooks they had brought were too large. So far they had caught only a single cod. What could they do?

Calmly Squanto assured them that in a few days the Town Brook would be swarming with alewives. When the fish arrived exactly on time. Squanto showed the colonists how to catch them and set them in the ground—three to each hill of five kernels, with the fish heads close to the seeds. He told the white men to set a guard over the fields for the next 14 nights until the fish rotted, or wolves would dig them up. The guard was set, the wolves were kept away and the corn began to prosper.

It was during this month that the

general routine of Plymouth's early years gradually established itself. The days were spent in the innumerable small tasks of frontier life. The fields had to be tended constantly. The carpenters, and others handy with tools, such as John Alden, made furniture and put finishing touches to the houses. When the women were not cooking and washing, they kept busy repairing the precious supply of clothes which there was little chance of replenishing for years to come.

Each Sunday at the beat of a drum, the entire town assembled in the street, and with every man carrying his gun, they followed Governor Carver to the common house for church services. The clothes they wore were not the drab black and brown suits which the Puritans were to bring to the New World. The Pilgrims were all Elizabethans, and loved colour in their dress. William Brewster had a violet suit, Governor Carver wore a fine red cloak, and another man had "sky-coloured garters," and "a cap with silver lace on it."

In church, Elder Brewster served as pastor. He believed prayers should be brief and frequent rather than long and tedious, and he preferred to speak of God's love and mercy rather than his wrath. Brewster's influence was to reach deep into Plymouth's life, making the colony famous for the mildness of its laws and religious tolerance.

Although Governor Carver and Brewster were among the oldest of the colonists—both were in their 50's—they insisted on working in the fields with the rest of the men. One hot day in mid-April Governor Carver suddenly dropped his hoe and complained of a pain in his head. Shortly afterwards he fell into a coma and died. He was buried with a guard of honour and a volley of arms over his grave.

Now came the crucial choice of a new governor. The logical successor would have been William Brewster, but he was automatically eliminated by his position as ruling elder of the church.

One of the Pilgrims' deepest convictions was the need for maintaining a separation between church and state, for they had experienced the disastrous effects of their union in England.

Unanimously, the choice fell to William Bradford, who was to be re-elected over 30 times. From his first days in office a new vigour entered Plymouth's public affairs. Younger men who had volunteered for the great adventure—strangers like Stephen Hopkins and John Alden, exiles like Edward Winslow—assumed their rightful leadership.

It is no exaggeration to call these men the first Americans. Virginia was still an area for English gentlemen in search of a quick fortune, an outpost of a dawning empire with its gaze fixed to the mother country. But William Bradford and his friends looked to the New



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Communal Life

EARLY IN May, the colonists celebrated Plymouth's first marriage. Governor Bradford performed the ceremony binding Edward Winslow, a widower of two months, and Susanna White, a widow of three months.

Many similar marriages took place in the next years, as the colonists recovered from the sorrows of that first tragic winter. William Bradford, whose wife Dorothy had been among the first to die, himself remarried in 1623.

But the course of love did not always run smooth at Plymouth. In Stephen Hopkins's home, for example, it almost led to murder.

The Hopkins household was typical of the crowded conditions in the tiny homes at Plymouth. Living with Hopkins were his wife, his two servants, Edward Dotey and Edward Leister, and four children, including the baby Oceanus and a 15-year-old daughter named Constance. She was a pretty, high-spirited girl, and the two servants soon found themselves competing for a kind word from her. It was an age when falling in love was considered a fatal disease, useless to resist, and when Constance coyly encouraged them both, these young bravoes became insanely jealous.

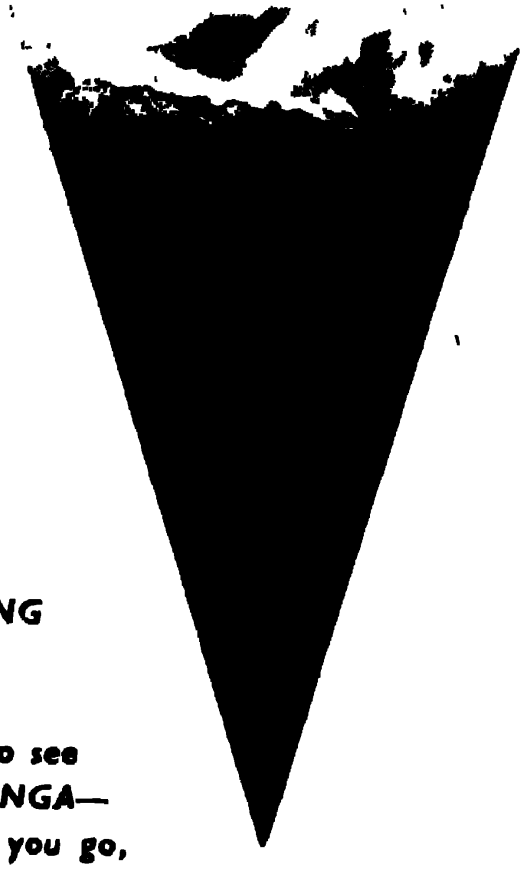
At dawn on June 18, Dotey and Leister silently left the house and stalked down to a deserted beach. There, sword in one hand, dagger in the other, they began to duel. Snarling and cursing, they raged up and down the shore. Dotey sank his rapier deep into Leister's thigh, and Leister slashed Dotey's sword hand.

Soon their battle cries awakened the colony, and Miles Standish came racing down to the beach with several other men. The redheaded captain was furious. With Red Indians around, he roared, no one had a right to risk his life, much less commit murder. Disarming the culprits at the point of his own rapier, Standish marched them to Governor Bradford.

Sitting as judge, Bradford gave the two men a stern lecture. Then, as punishment, they were ordered to be bound up with head and heels tied together to "cool off their hot blood." Within an hour their cries for mercy became so pitiful that Stephen Hopkins asked Bradford to pardon them. The governor was happy to agree, and the two suitors were quickly freed.

Ironically, the fair Constance did not marry either of her ardent admirers. Perhaps impressed by the dangers of idle flirting, she waited another seven years, and then chose a newcomer from England.

All through the summer the colonists' relations with the Indians continued to improve. Massasoit agreed to send envoys to the Indians on Cape Cod to explain why the



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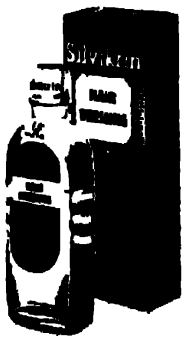


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white men had taken corn and to offer restitution, and a peace treaty was arranged with the hostile Nausets.

Only once was the peace seriously threatened. At a near-by village a minor chief named Corbitant began to make sneering speeches against Massasoit's treaty with Plymouth. When Squanto visited the village he was seized. Corbitant threatened to kill him, shouting that if he were dead, the white men would "lose their tongue."

This alarming news was brought to Plymouth by an Indian who had witnessed the scene, and Governor Bradford immediately called an emergency session of the colony's leaders. Wisely they decided to risk a show of strength. With ten men, Miles Standish made a surprise attack on the village at night, surrounding the chief's hut. Corbitant managed to escape, but Squanto was released to the colonists unharmed.

Then Standish made a grim speech. Although Corbitant had fled, he announced, there was no place in the land where he would be safe if he continued to mock Massasoit's great treaty of peace. They were daring words for a man with only 32 soldiers, but never while Standish lived did the new commonwealth react to insult with weakness. The wisdom of this policy was soon apparent. Congratulations and promises of peace poured into the little settlement from chiefs near and far, and soon a humbled Corbitant asked Massasoit to help him make peace with Plymouth.

A Feast of Thanksgiving

As THE weeks passed, the Pilgrims realized that their colony was taking firm root in the New World. By now, four "common" houses and seven private dwellings were completely finished. The General Sickness had ended, and they no longer faced the threat of annihilation.

Governor Bradford, the son of a farmer, remembered the harvest celebrations of his homeland. He also recalled the annual Thanksgiving Day held in Leyden on the anniversary of the city's deliverance from the Spaniards. Why not have a similar holiday in Plymouth so that they might "after a more special manner rejoice together"?

Preparations for the first Thanksgiving were soon under way. The colony's 20 acres of maize had yielded an excellent harvest, but the plantings of English barley and peas came to nothing. This emphasized how dependent the Pilgrims were on their Indian allies, for without the maize they would have faced a winter of certain starvation. No doubt this was one of the main reasons why an invitation was sent to Massasoit to join the festival.

Bradford then sent out four hunters, and in one day they killed enough wild turkeys to feed the entire colony for almost a week. Eels, lobsters and shellfish were

gathered from the bountiful shore. But all this abundance seemed like nothing when Massasoit arrived with no fewer than 90 hungry men.

Ninety braves! The colonists could see most of their provisions for winter vanishing in one great feast. They did not realize that for Massasoit and his men a harvest festival was a familiar institution. Nearly all the tribes along the Atlantic coast of North America celebrated the ripening of crops with a "Green Corn Dance."

Assuming he had been invited to Plymouth's version of this feast, Massasoit knew he would be expected to contribute food. He promptly sent some braves into the woods and they returned with five "fine deer." These were presented to five leaders of the little colony—Governor Bradford, William Brewster, Miles Standish, Edward Winslow and Stephen Hopkins.

But the food was by no means confined to fish and meat. The household gardens had produced a variety of vegetables. The wild fruit of summer, gooseberries, strawberries, plums and cherries had been dried under Squanto's directions. The colonists had made wine—both white and red—from wild grapes, and the Indians' first taste of this drink further convinced them that their new allies had magic powers.

The cooking was nearly all done in the open—deer, turkey, geese and partridge were turned on spits; lobsters and oysters roasted over coals; clam chowder and venison stews simmered in iron kettles over dancing fires. When they were not eating, the hosts and guests joined in games. There were shooting exhibitions with both muskets and bows, and the Indians were delighted when some of the younger white men like John Alden joined them in their races and wrestling matches.

Always eager to impress the Indians with his little army, Miles Standish presented a military parade, which he climaxed by firing one of the fort's cannon. The Indians had been astounded at the crash of the muskets, but the sound of this mighty gun seemed to steal the thunder from heaven itself. Truly Massasoit had been wise to make peace with these people.

The feast continued for three full days of marathon eating, drinking and gaiety. During the nights the Indians slept in near-by fields. Gone were the fears that had once made Standish post guards, for, by the time the first Thanksgiving ended, the formal alliance between Plymouth and Massasoit had been cemented by ties of genuine friendship. Red men and white men parted, vowing to repeat the feast the following year and for many years to come.

One Small Candle

As WINTER approached, the colonists prepared for the lean months ahead. New thatch was added to the roofs, chinks were daubed with



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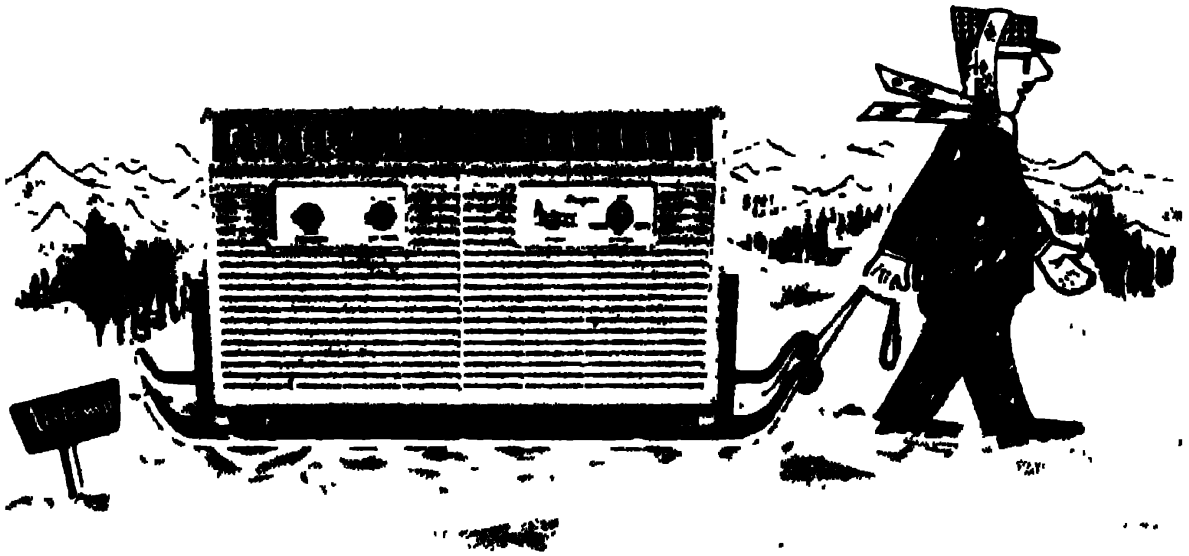
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day, and the hunters laid in a good supply of wild fowl and venison.

But all this work was suddenly interrupted by an excited Indian who raced into town with news from Cape Cod. There was a ship sailing towards Plymouth. A great ship with sails. A white man's ship!

The news caused immediate concern. No ship was expected from England, and the colonists feared an attack from marauding pirates, or French or Spanish privateers. Quickly Bradford ordered a cannon to be fired to call in those who were out hunting. Miles Standish stationed small squads of men along the shore to repel any landing parties that might come.

Hours passed, and then the mysterious ship became visible off the entrance to the harbour. A longboat was lowered from the ship, and as it headed towards the shore many of the Pilgrims recognized the figure which stood at the prow: it was their old friend, the man who had helped hire the *Mayflower*, Robert Cushman.

Altogether, 35 passengers came ashore from the good ship *Fortune*. Most of them were men, and all were healthy. But, best of all, Robert Cushman had brought a new patent in answer to an application which the Pilgrims had sent aboard the returning *Mayflower*. The new grant confirmed the Pilgrims' possession

of Plymouth and recognized their Compact. It authorized them to establish laws and ordinances for governing themselves by majority rule.

As William Bradford looked at the strong bodies and eager faces of the new arrivals, he must have known that the worst was over for him and his fellow voyagers. Whatever troubles were to come, Plymouth would survive and prosper.

Other men would follow, men of different beliefs who would found more powerful colonies in the vast continent. But only Plymouth would contain, in such pure and dramatic form, the unique combination of courage and faith that would be the touchstone of a new nation's values and ideals.

Perhaps William Bradford already felt the quiet pride evident in the lines he was to write years later, summarizing the great adventure:

> As one small candle may light a thousand, so the light kindled here hath shown unto many, yea in some sort to our whole nation . . . We have noted these things so that you might see their worth and not negligently lose what your fathers have obtained with so much hardship. THE END

Rare Interpretation

DURING a dancing-class display, the children were led out one by one to perform something of their own choosing. One little girl interpreted a butterfly, another a swan, a third a deer, and so on. But the star of the show was my little niece, who baffled everyone by wobbling back and forth from one side of the stage to the other, finally disappearing into the wings with a big lurch. Asked what she was supposed to represent, she triumphantly announced: "A loose tooth!" —Contributed by Bob Pierron

* * *

The Bulldog Breed

AS A visiting Englishman was driven up an American street, he cast aspersions at the passing scene, particularly at the "*hideous* architecture."

"We call it Victorian," said his host. —S. C.

AN ENGLISHMAN, at a loss for conversation with an Arab diplomat at an embassy reception in London, hazarded an opener: "They tell me that in your country you worship the sun."

"So would you," the Arab answered, "if you ever saw it." —S. C.





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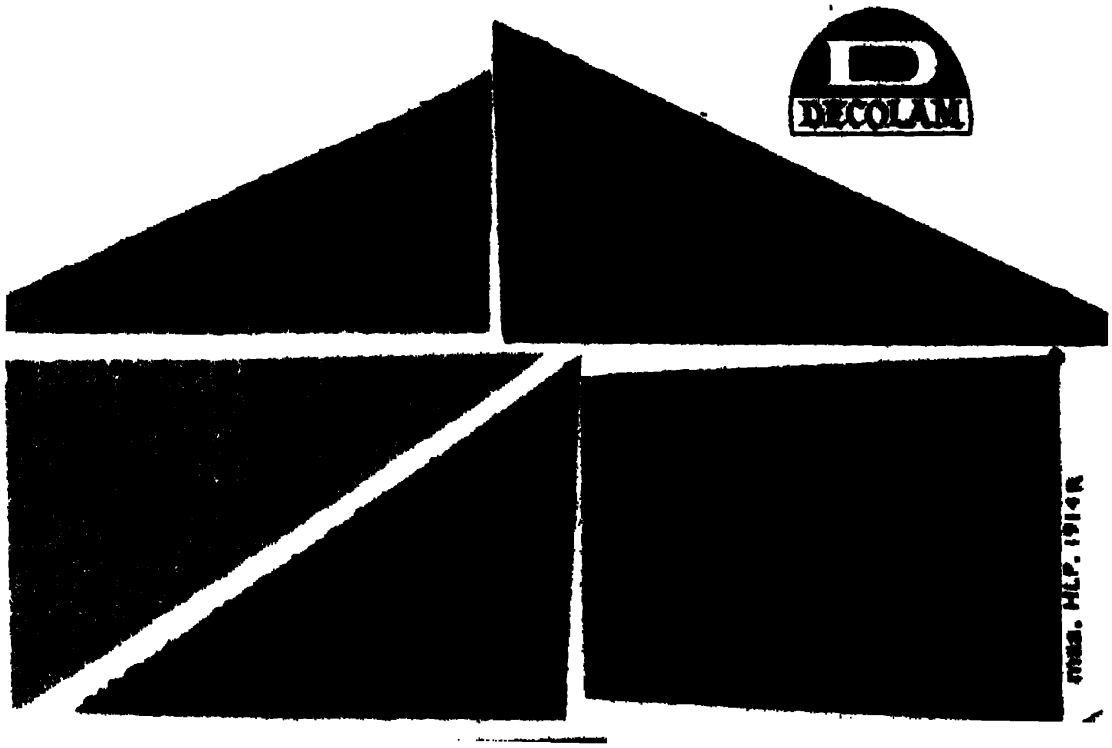
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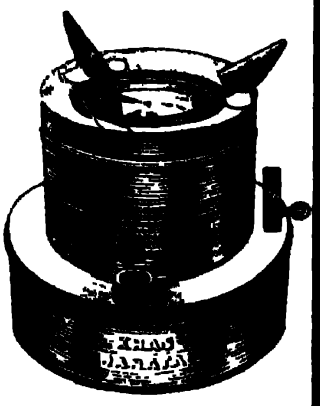
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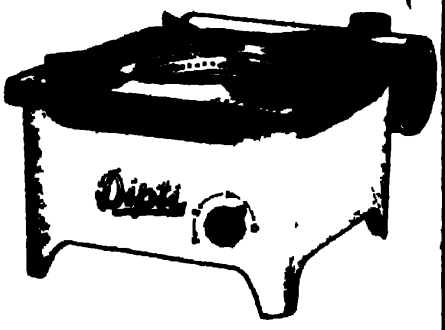
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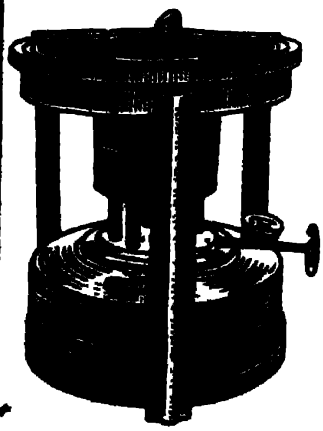


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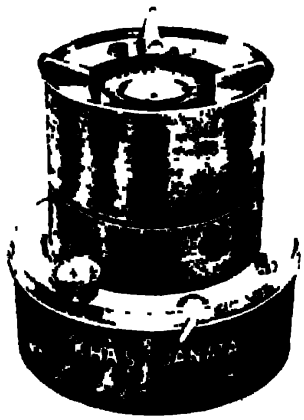


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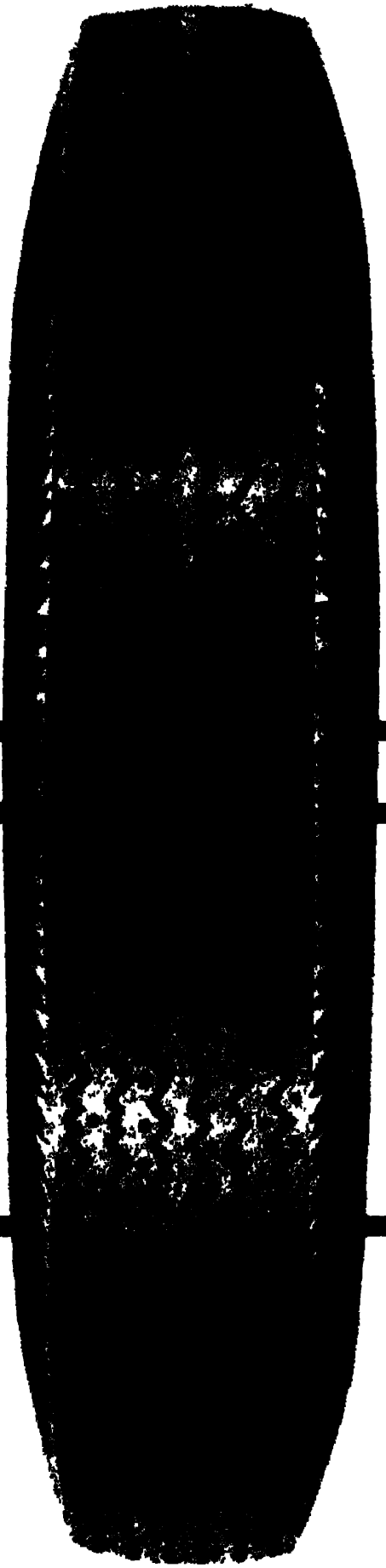


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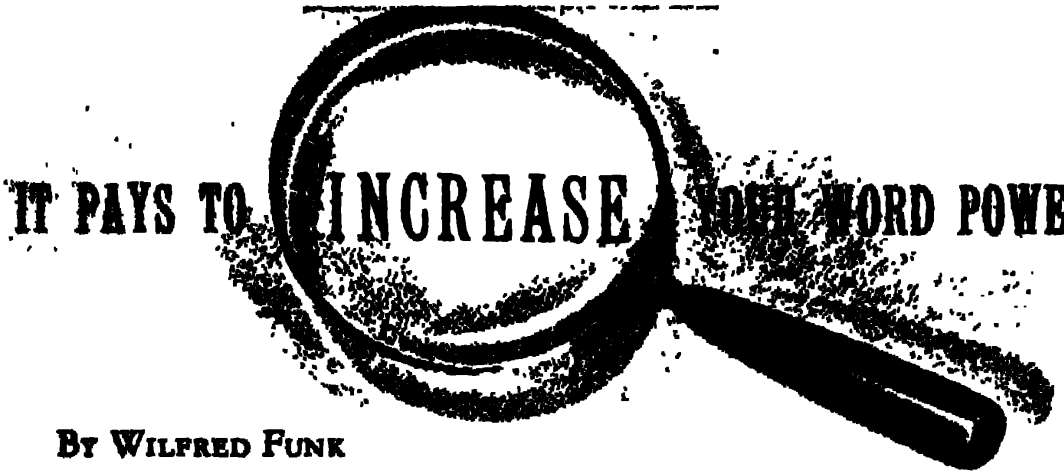
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By Wilfred Funk

In this list of useful verbs, tick the word or phrase you believe is *nearest in meaning* to each key word. Answers are on page 12.

(1) **perturb** (per turb')—A: to upset. B: cause doubt. C: burden. D: test.

(2) **usurp** (ū surp')—A: to yield. B: demand unlawfully high interest on a loan. C: seize power or position illegally. D: climb upon.

(3) **recriminate** (rē krim' i nate)—A: to resist authority. B: accuse in return. C: repeat an illegal act. D: restate.

(4) **ensconce** (en skons')—A: to surround. B: promote. C: honour. D: settle comfortably.

(5) **elude** (ē lude')—A: to evade. B: omit or leave out. C: make mention of. D: deceive.

(6) **rifle**—A: to disturb. B: shoot. C: seize. D: plunder or ransack.

(7) **mollify** (mol' i fī)—A: to irritate. B: appease. C: amuse. D: limit the meaning of.

(8) **recoup** (rē koop')—A: to recover. B: trap. C: strengthen. D: shuffle.

(9) **substantiate** (sub stan' shi ate)—A: to weaken. B: substitute. C: verify. D: make wealthy.

(10) **solicit** (sō lis' it)—A: to command. B: worry. C: sympathize with. D: ask for.

(11) **embroil** (em broil')—A: to anger. B: involve in dissension or strife. C: encompass. D: bring to the boiling point.

(12) **envisage** (en vi zij)—A: to face. B: seek. C: understand. D: foresee in imagination.

(13) **compound** (kom pound')—A: to emphasize. B: confuse. C: put together. D: compress.

(14) **beguile** (bē gile')—A: to charm. B: become shy. C: flatter. D: smile at.

(15) **slacken**—A: to grow weary. B: dampen. C: become less active. D: quench.

(16) **submerge** (sub merj')—A: to walk on. B: sink. C: appear. D: join together.

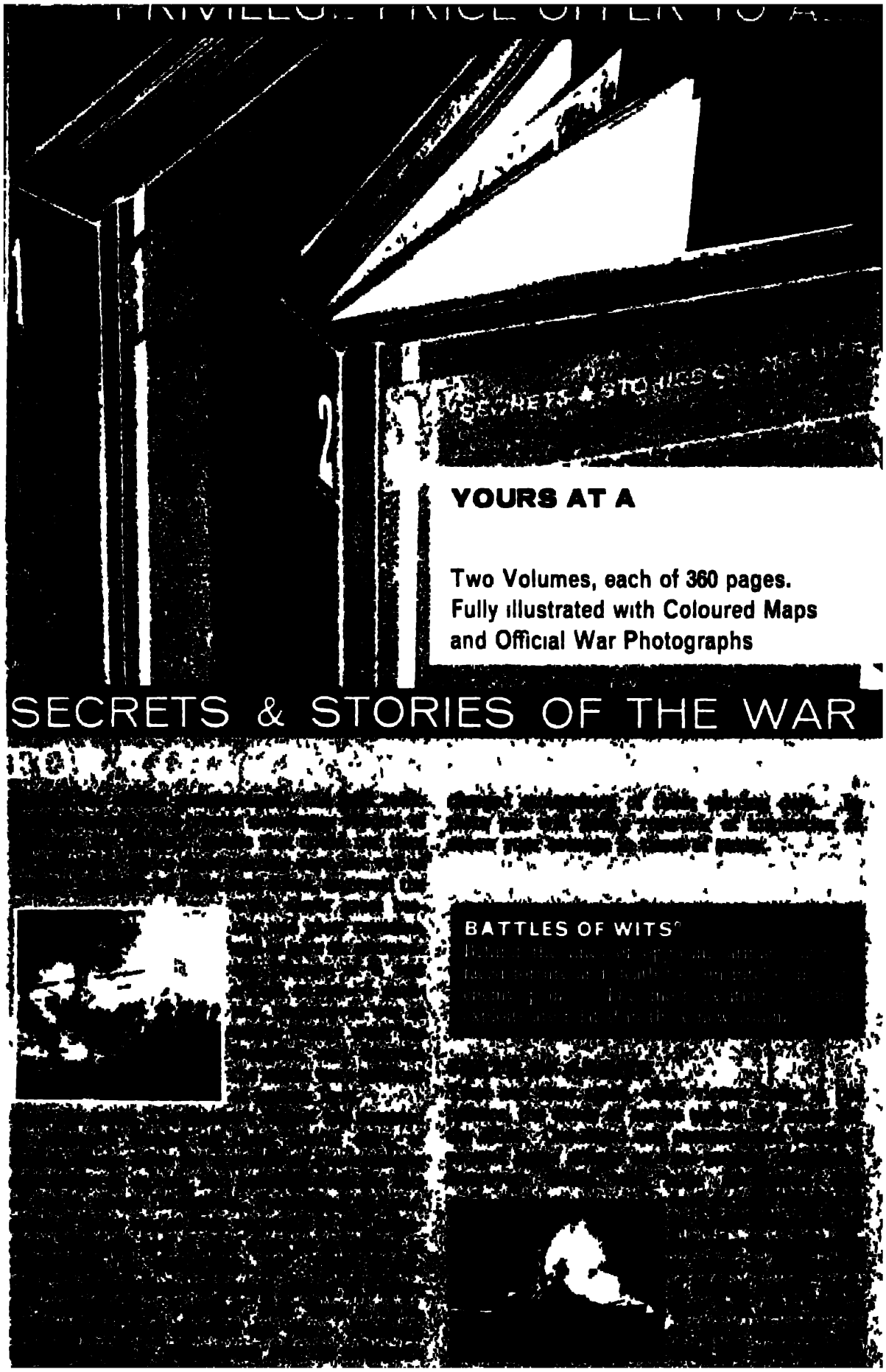
(17) **replenish** (rē plen' ish)—A: to spread around. B: fulfil. C: indulge. D: provide a new supply for.

(18) **convulse** (kon vuls')—A: to shake violently. B: restrict. C: befuddle. D: impel.

(19) **placate** (plā' kate)—A: to flatten out. B: pacify. C: annoy. D: make secure.

(20) **ingratiate** (in grā' shi ate)—A: to make ungrateful. B: force one's way in. C: place (oneself) in a favourable position. D: provoke.

(Now turn to page 12)


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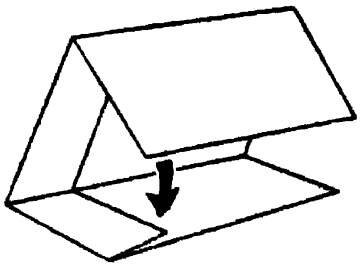
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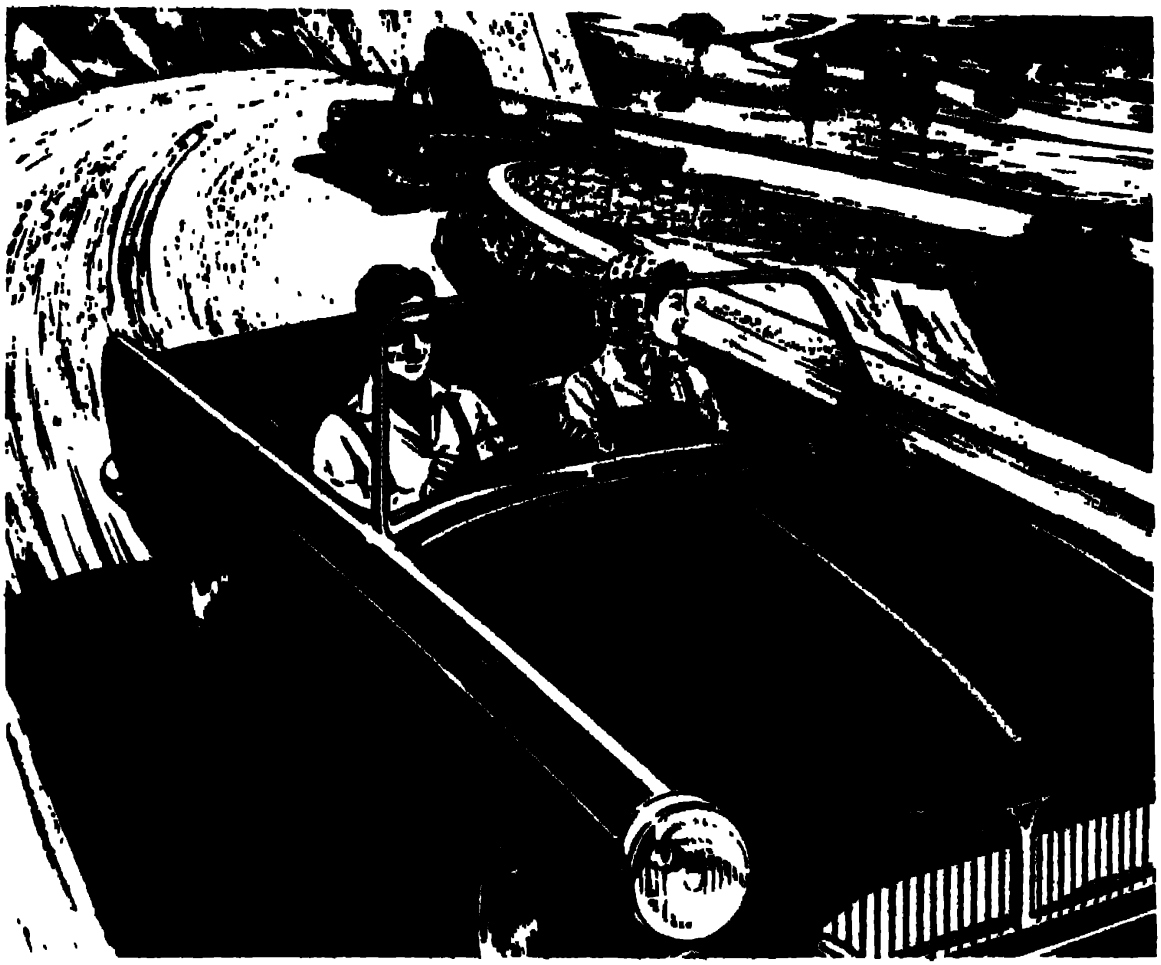
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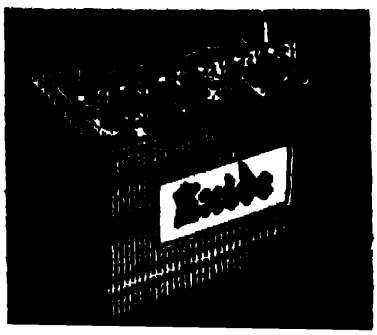
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IT PAYS TO INCREASE YOUR WORD POWER

Answers to the quiz on page 7

(1) **perturb**—A: To upset; disturb; trouble; as, "Youth problems *perturb* the community." Latin *perturbare*.

(2) **usurp**—C: To seize power or position illegally; as, to *usurp* the leadership of the council. Latin *usurpare*.

(3) **recriminate**—B: To accuse in return; make a countercharge; retort sharply or bitterly; as, to *recriminate* against detractors. Latin *recriminare*.

(4) **ensconce**—D: To settle comfortably or snugly; as, to *ensconce* oneself before the fire. Old French *esconse*, "hiding place."

(5) **elude**—A: To evade or avoid, escape from; as, to *elude* one's pursuers. Latin *ex-*, "out," and *ludere*, "to play."

(6) **rifle**—D: To plunder, ransack or pillage; search through and rob, as, to *rifle* a handbag. Old French *rifler*.

(7) **mollify**—B: To appease, pacify, as, to *mollify* an angry crowd. Latin *mollificare*, "to soften."

(8) **recoup**—A: To recover; regain as compensation; make up for, as, to *recoup* one's losses. French *recouper*, "to cut again."

(9) **substantiate**—C: To verify; establish by strong proof; as, to *substantiate* earlier statements. Latin *substare*, "to stand firm."

(10) **solicit**—D: To ask for; try to obtain by request; as, to *solicit* favours. Latin *sollicitare*, "to agitate."

(11) **embroil**—B: To involve in dissension or strife; as, to *embroil* the opposition in violent argument. French *embrouiller*, "to jumble up."

(12) **envisage**—D: To foresee or contemplate in imagination; as, to *envisage* a bright future.

(13) **compound**—C: To put together, as elements or parts, to form a whole; combine; as, to *compound* a prescription. Latin *componere*, from *cum*, "together," and *ponere*, "to place."

(14) **beguile**—A: To charm; divert; entertain; as, to *beguile* the reader. (*Beguile* can also mean delude, deceive or cheat.) Middle English *begilen*

(15) **slacken**—C: To become less active or violent; abate; slow, moderate; as, to *slacken* one's pace Old English *slaecian*.

(16) **submerge**—B: To sink, as in water; cover or bury; as, to *submerge* vital problems in political debate. Latin *submergere*, "to plunge under."

(17) **replenish**—D To provide a new supply for; as, to *replenish* the larder. Old French *replenir*, from Latin *re-*, "again," and *plenus*, "full."

(18) **convulse** A: To shake or agitate violently; throw into confusion; as, "Periodic crises *convulse* the modern world." Latin *convulsus*, from *convellere*, "to tear up, shake."

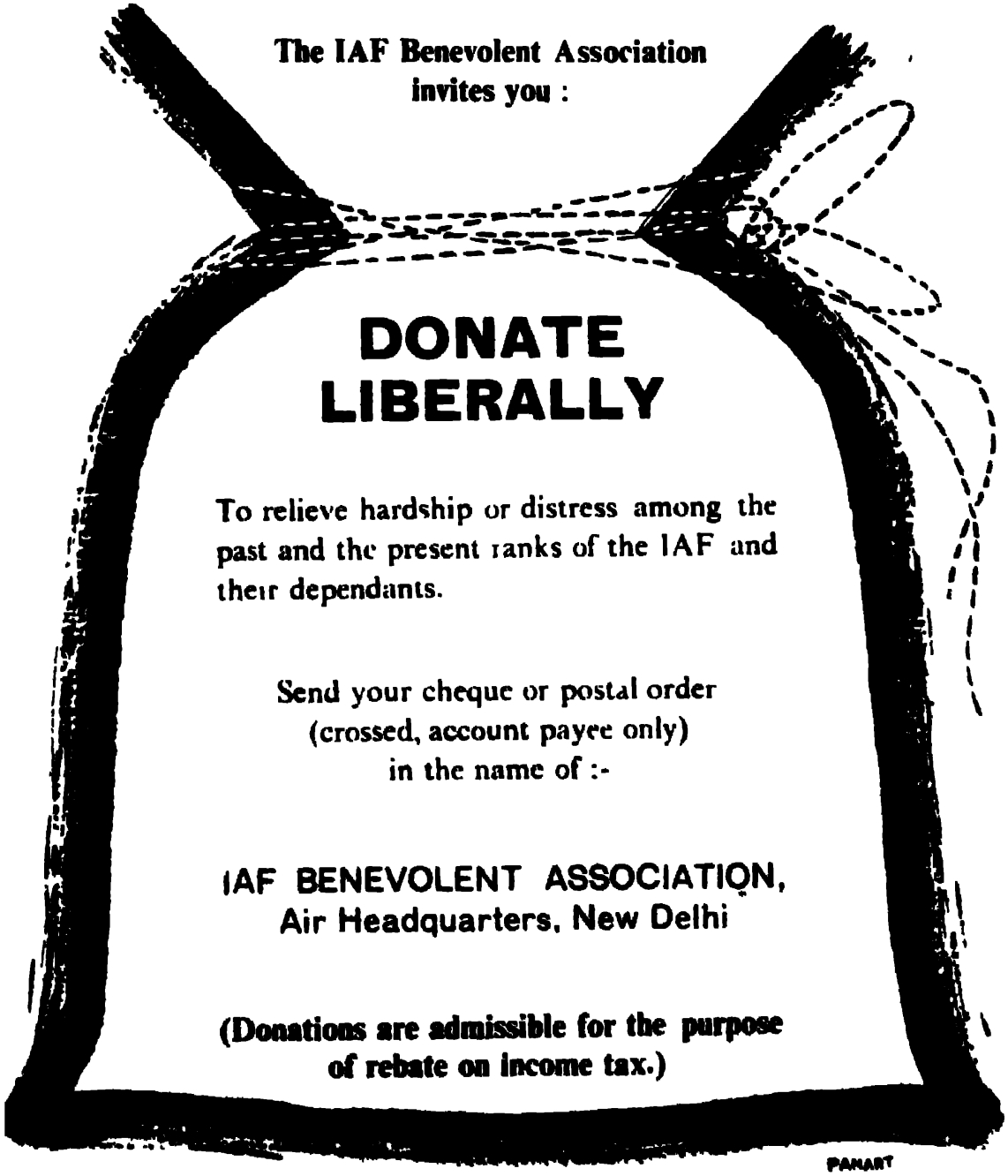
(19) **placate**—B. To pacify; soothe, as, to *placate* an opponent. Latin *placare*.

(20) **ingratiate**—C. To place (oneself) in a favourable position, to win confidence or favour; as, "He strove to *ingratiate* himself with the directors." Latin *in* and *gratia*, "grace, or favour."

Vocabulary Ratings

20 correct ..... **excellent**
19–17 correct ..... **good**
16–14 correct ..... **fair**

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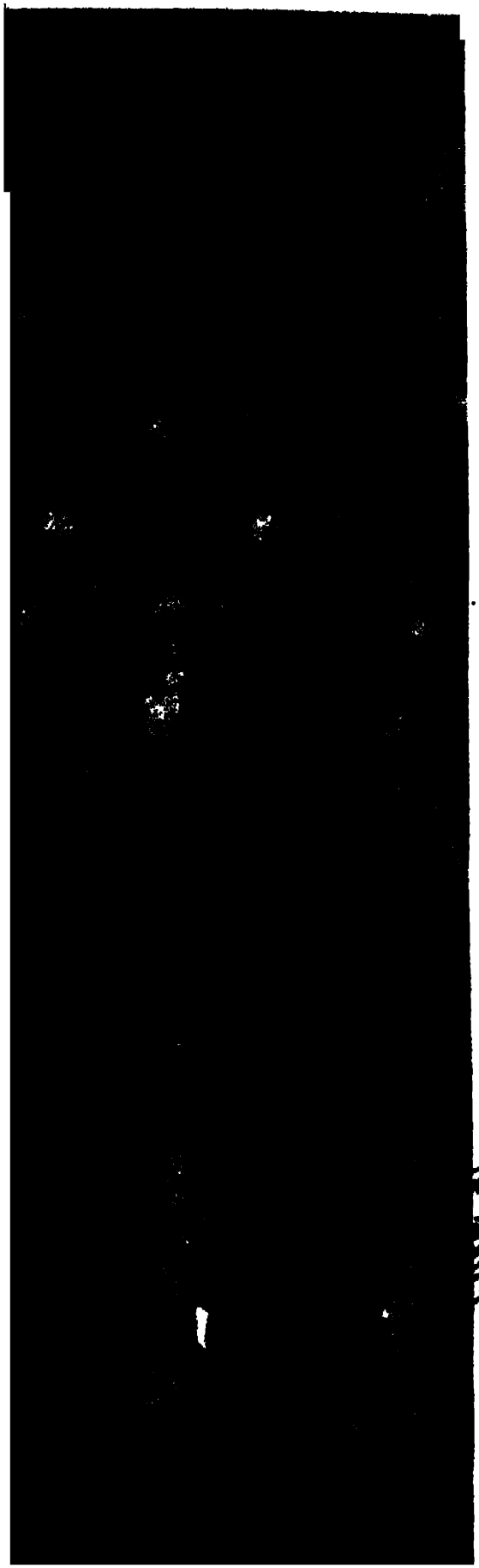
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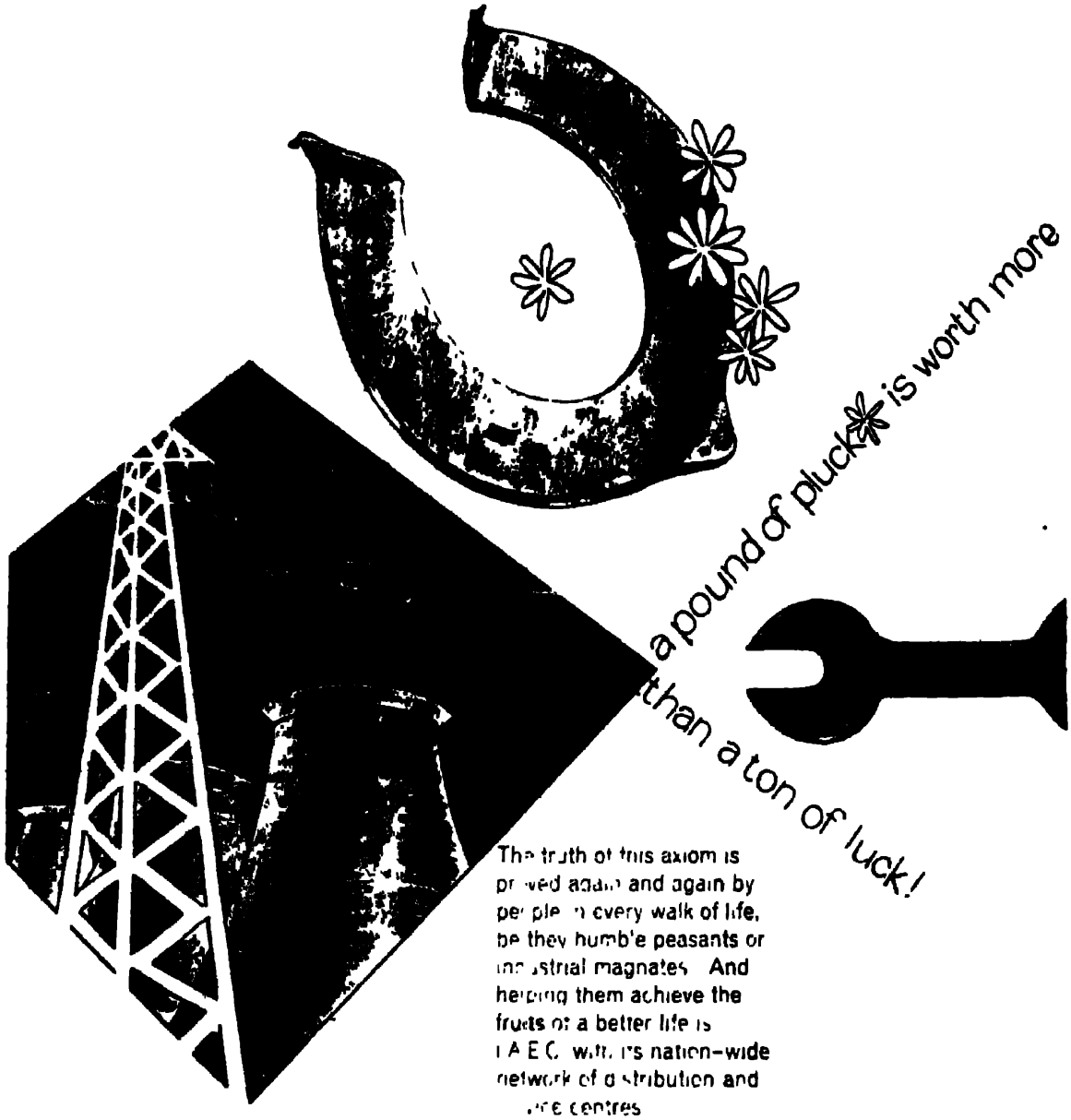
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HUMOUR IN UNIFORM

WHEN A NEW battalion arrived on station, the men were immediately sent out on manoeuvres. Thinking it a good opportunity for the officers' wives to get acquainted, the commanding officer's wife invited the 30 women to her home for a buffet supper. The hostess poured the drinks, emptied ashtrays, served the supper and emptied more ashtrays.

She was busy long after her guests had left, cleaning the kitchen to be ready to feed her four children the next morning.

The following day, worn out, she answered the phone to hear a grateful second-lieutenant's wife pay her the ultimate compliment. "We had such a good time last night. We all agreed it was just as though you weren't even there." —MRS. HOWARD WILCOX

LONELY servicemen are always much in evidence in Hawaii. One night we were in a crowded and noisy Waikiki restaurant with an unusual number of service personnel. It is the custom of restaurants there to give numbers to orders, to facilitate handling.

As the tempo of business increased, one frantic waitress shouted over the din "44-24-38." Whereupon a young seaman stood up, raised his hand and shouted back, "I'll take her!"

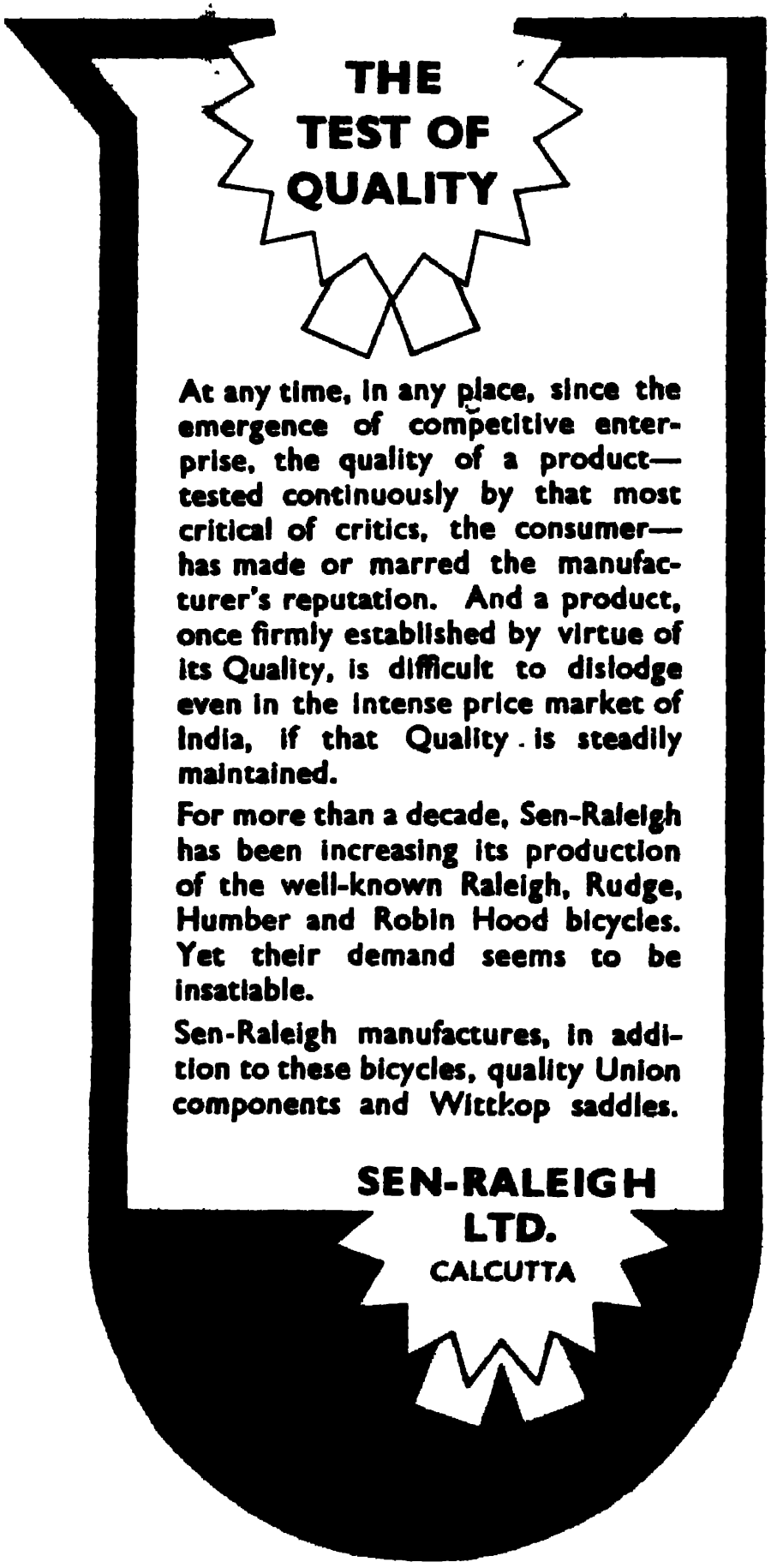
—JAMES HALEY

THE discussion turned to the difference between a "fort" and a "fortress." An old army sergeant had the question put to him. "It's perfectly simple," he replied. "If it has breastworks, it's a fortress." —H. H.

EVERY FLIGHT in a U.S. Air Force passenger plane begins with a briefing on how to wear a parachute and on other emergency procedures. Before a recent flight the pilot had finished the briefing when the aircraft commander came aboard. As the latter climbed in and looked over the passengers, he contributed the following tail-piece: "Major Smith has briefed you on procedures. You will remember he stated that in the event of emergency evacuation the aircraft commander will be the last to leave the plane. I might add to that: if such an emergency should arise and you see me pass you on the way out, you have just become the aircraft commander!" —J. M. B.

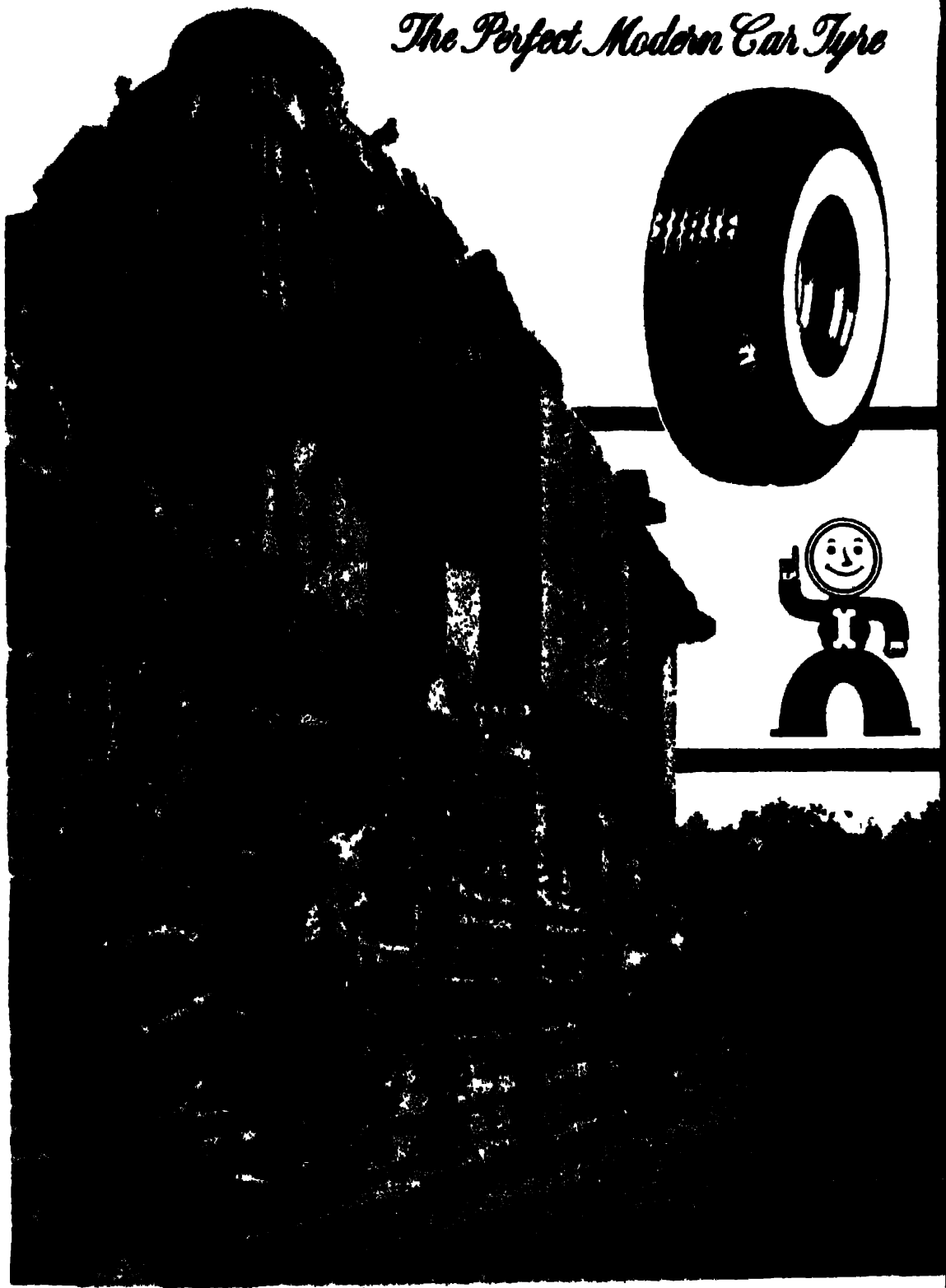
A SAILOR who limped into the naval hospital had his foot X-rayed and was asked to wait for the results.

Later an orderly appeared and handed the sailor a large pill. Just then a mother with a child in need of immediate attention entered. After the orderly disappeared with the new patient, the sailor hobbled over to get a glass of water, swallowed the pill and sat down to wait. Some time later the orderly reappeared carrying a bucket of water. "O.K.," he said, "let's drop the pill in this bucket and soak that foot." —H. E. HICKS


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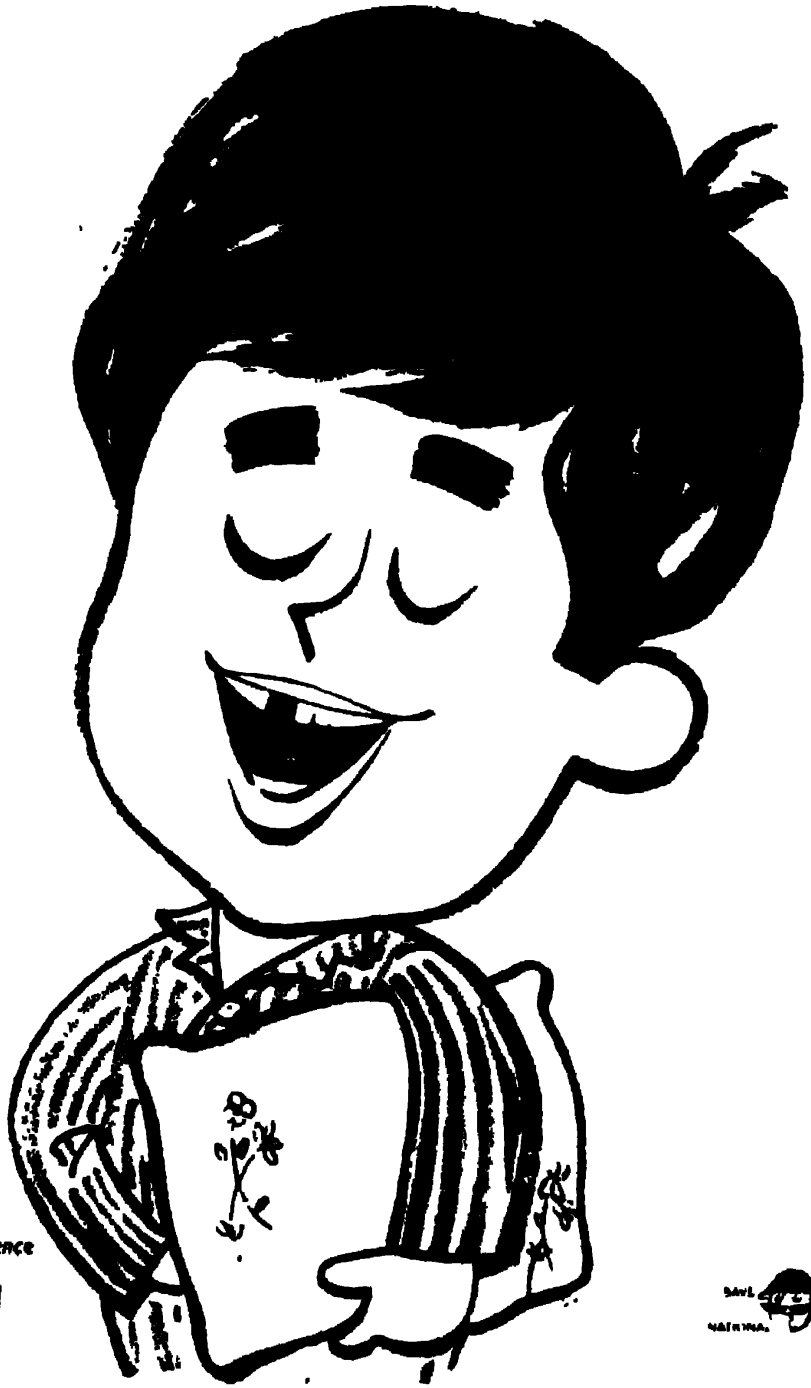
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THE SELF-HEALING POWERS OF THE MIND

Nature has provided mankind with an array of forces designed to withstand emotional stress and strain, and to help disturbed mental processes to return to normal balance

By Morton Hunt

During the war, I flew lonely reconnaissance missions deep into Germany week after week. Under this stress I became strange and alien to myself: my handwriting became crabbed and illegible, I drank and gambled night after night, I could read nothing more substantial than the scandal sheets, and music, one of my chief joys, became boring and meaningless. One night, on my way to the briefing room, I even seriously considered trying to break my ankle —to avoid being sent out on another flight.

I was on the verge of a breakdown when the fighting ended. Then for weeks I slept, daydreamed and drifted through my duties. Meanwhile, deep inside, where the wellsprings of joy and health reside, a healing and a regrowth must have been taking place.

For gradually I began to read books again, my handwriting ceased to look like that of a crippled old man, and one day, hearing a familiar Mozart aria on a near-by radio, I suddenly felt a flood of good feeling wash through me. I had the eerie sensation that all at once I was

in the presence of a long-lost friend —myself. "It's me!" I thought in amazement. "I'm back!"

Spontaneous recoveries from emotional ailments are vastly more common than most of us realize. What does it? The mind itself.

A decade or so ago, most psychiatrists thought that an ill mind had little chance to cure itself; their thinking was still focused on the mind's frailties. Today that's changing. Many psychiatrists now stress that the human mind, like the body, has a whole battery of weapons to heal its own ills. Without denying the value of psychiatry for the severely disturbed, the new viewpoint suggests that millions of people with emotional problems have the resources to heal themselves.

The Balance Restorers. The mind's self-healing mechanisms are surprisingly parallel to those of the rest of the body. Take one of the body's basic principles, "homeostasis," or maintenance of equilibrium between its organ systems: when we get too hot, for example, we sweat, in order to keep our temperature constant. In a comparable way, the mind tries to restore emotional balance when it is upset. People plagued by feelings of unworthiness, guilt or inadequacy often unconsciously turn to an occupation which offsets these feelings—a mental device known as "compensation." An excellent illustration of this is Glenn Cunningham, who, having been burned as a child and told he would never walk again, not only walked but became one of the world's greatest milers.

A parallel also exists between the body's ability to wall off an invading foreign object within a cyst and the mental-balance restorer called "rationalization." When we talk ourselves into thinking an agreeable thought about a disagreeable fact, we are encysting the thing that hurts us. A friend of mine, for example, lost money in a foolish investment, and now cheerfully says of the experience, "It was an expensive lesson—but it was worth it."

In the past, many psychiatrists thought of rationalization, compensation and the other mental defences as unhealthy. Today, some boldly state that although exaggerated defence reactions *can* be harmful—like temperatures that run too high—more often mental defences are curative balance restorers. In her book on psychiatry, Dr. Melitta Schmideberg expresses the current view: The mental defences are as essential as any vital organ of the body.

No End to Emotional Growth. The new viewpoint is changing another pessimistic notion: the theory held by some psychoanalysts that we stop growing emotionally after adolescence, that the flaws built into a person's character in the early years can be removed only by intensive therapy. The latest data indicates that the personality is often

quite capable of straightening itself out during maturity.

Many a university student who drops out is diagnosed as having a "character disorder"—as being impulsive, wilful, irresponsible, lacking in conscience. Researchers recently surveyed a number of men who had dropped out because of emotional problems, found that many of them had gone back to college and finished well, and that most of the group had done well in later life.

Why? Because emotional growth never stops. It often takes only the sunshine and rain of love, work, parenthood to make the bent plant straighten up.

The Healing of Love. Freud said that each love we experience, whether for parent, beloved or friend, leaves a deposit in the self, enlarging and maturing it. When we fall in love, we gain a sudden new perspective on ourselves: we know how we want the loved one to see us, and we try to transform ourselves to match that image. Moreover, love is a completion, a satisfying of deep needs; most of us fall in love with someone whose personality is the complement of our own (the strong, driving person with the frail, timid one, for instance) and through whom we can try to fulfil ourselves.

A few years ago, a study was made of 34 adults who had been uncommonly shy and withdrawn children. Most of them, it was revealed, had turned out quite well—and, significantly, three-quarters of these had married extroverts, who completed their personalities and healed their old hurts.

The Challenge of Work. Thomas Carlyle once wrote, "Work is the grand cure for all the maladies and miseries that ever beset mankind." Neuroses are, in a sense, childish things, and some persons are fortunate enough to find challenges so serious and adult that they are able to put away childish things. Many years ago, a young lawyer suffered such depressions that his friends thought it wise to keep knives and razors out of his reach. He wrote: "I am now the most miserable man living. Whether I shall ever be better, I cannot tell; I awfully forebode I shall not."

He was wrong. The challenges that life offered him brought him a health and a strength that saved him and his country from dissolution. His name was Abraham Lincoln.

Forgetting and Reconditioning. One of the most important self-curing agencies is our human propensity to forget unpleasant things. Psychological researchers have given subjects tasks and puzzles to do, arranging them in such a way that not all could be completed. Afterwards, when the subjects were asked to recall which tasks they had finished and which they had not, those with shaky self-esteem tended to remember only the tasks they had

managed to complete. As someone has said, "Remembrances embellish life; forgetfulness alone makes it endurable."

More demanding than forgetting is a laborious process we might call "reconditioning"—a kind of rewiring of the brain in which our reactions are changed, one by one. We do it, for example, when we grieve for a dead person. The very process of going over the fond thoughts again and again gradually conditions us to our new status. The healthy mind slowly arrives at the point where it can look back with a loving smile instead of tears.

Psychological Antibodies. Just as a cured infection leaves antibodies behind, a hurt, once healed, may leave us with a net gain—greater self-awareness, increased maturity.

An event that shocks can set off a process of reorganization and growth in the whole personality. Many a playboy has grown up only after his parents died. Going off to military service has transformed more than one disturbed young man. "The loss of supportive persons," writes Dr. Ian Stevenson in the *American Journal of Psychiatry*, "seems often to contribute to recovery from the psychoneuroses."

Even a severe mental illness can sometimes leave a person who recovers from it healthier than he was, thanks to deeper self-understanding, according to psychiatrist Dr. Karl Menninger. Thus, many famous writers—including John Stuart Mill and William James—did their best work after severe depressions or nervous breakdowns.

Self-Acceptance. The most valuable and pervasive of all the mind's defences is belief in self and in life.

Psychologists refer to it as "self-acceptance," the power that enables us to see ourselves realistically and to concentrate on our assets so that we come to like what we see. William James spoke of this power as the "religion of healthy-mindedness." Dr. Menninger calls it an "inner strength," which he feels all people have in varying degrees.

None of this means that we can always sit back and complacently assume that all will go well. Though it is true that the mind has remarkable self-restorative powers, it is sometimes necessary to give those powers help. A person with a serious emotional problem *should* seek professional advice.

Yet, having looked closely at the self-healing powers of the human mind, I am encouraged to think that our natural and unconscious inclination is to mend ourselves rather than to destroy ourselves. Though a thousand wise and gloomy philosophers have called man a frail, wretched and miserable creature, I prefer to side with the Psalmist, who sang, "I am fearfully and wonderfully made."

Condensed from Family Weekly

The Pilgrim Pope

In a few memorable days in January, Pope Paul VI shattered a history book full of precedents. An inner call to attempt a major contribution to world hopes for peace and reconciliation prompted his decision to be the first pontiff since St. Peter to visit the Holy Land. In making that pilgrimage he became also the first Pope to travel by air, the first in five centuries to meet the head of the Orthodox Church, and the first to call upon Arab and Israeli chiefs of state.

His patience and piety caught the imagination and respect of millions throughout the world who followed his progress on radio, television and through the Press. At the River Jordan, where Jesus was baptized by St. John the Baptist, Pope Paul greeted a crowd in French. In the Arab half of divided Jerusalem he trod Jesus' path to Calvary along the Via Dolorosa. Before he and his attendants reached the Church of the Holy Sepulchre, they were almost overwhelmed by jostling, shouting thousands.

Visits to Nazareth, Capernaum and Mount Zion were followed by a historic meeting with Ecumenical Patriarch Athenagoras I of Constantinople. It was the first contact between the heads of the Roman Catholic and Orthodox Churches since the fifteenth century.

Whatever may be the immediate result of conferences on church re-unification that are being planned, there can be no doubt that Paul VI has given the papacy and the Roman Catholic Church a new and friendlier image in the eyes of the world.



ONLY AN HOUR after his election last June as Supreme Pontiff of the Roman Catholic Church, the slight, erect successor of Pope John XXIII stepped out on the central balcony of St. Peter's Basilica in Rome to give his first blessing to the city and to the world. The new Pope, who had taken the name Paul VI, was greeted by a thunderous roar from the crowd of 100,000 in the square below. His graceful, austere gestures reminded many of Pius XII. One reporter commented: "He looks as if he has been Pope all his life."

Giovanni Battista Montini, the Cardinal-Archbishop of Milan was,

Condensed from Time

at 65, the right age. He was that all-but-impossible combination, a "liberal" Italian who was basically acceptable to both Curia traditionalists and non-Italian progressives. He had a desirable blend of ecclesiastical experience behind him: eight years in charge of Italy's largest diocese, following 30 years of service in the Vatican's Secretariat of State. He had been a protégé of Pope Pius XII; yet he was also a friend of Pope John, and he favoured the continuation of the Ecumenical Council.

Montini's choice of name was significant. "The name is a programme in itself," one cardinal asserted. Clearly, Pope Paul intended to recall the great Apostle to the Gentiles, who, said the editor of *L'Osservatore Romano,* is "a symbol of ecumenical unity, venerated by Catholics, Protestants and Orthodox Christians." It was St. Paul who internationalized the early church; it was Paul, through his dynamic letters, who gave universal scope to the teachings of the Nazareth carpenter.

Paul VI is a strange and complex man whom few have been able to define with precision. Italian banker Vittorino Veronese, a former chief of Italy's Catholic Action movement, says that he has "such a very rich personality that he is impossible to classify." Paul's friends claim that he combines the learning and intellectuality of Pius with the openness and reforming spirit of John XXIII. Some critics point out that he seems to share Pius's imperious ways with subordinates and lacks John's instinctive warmth towards his fellow men. He has been hailed as a distinguished administrator. Other appraisals range from "a great gentleman" and "a complete man" to "a Hamlet." Though, like Hamlet, Paul VI may be marked for tragedy, friend and foe alike agree that he has within him the seeds of greatness.

Quiet Charisma. Paul VI was born into the comforts of Italy's middle class at Concesio, a country village near Brescia in the north. He was the second son of Giorgio Montini, a crusading journalist and parliamentary delegate with progressive political and social views. "Gianbattista" was a frail, ailment-prone child plagued by colds, who had to be educated privately after poor health drove him from the Jesuit school in Brescia. But at the age of 20 young Montini was well enough to attend the seminary of Sant'-Angelo in Brescia. He was, then as now, somewhat withdrawn and bookish. One teacher recalls him as the best pupil he ever had, while some fellow students detected in him the quiet charisma of the born leader. "Never have I met anyone who had to say so little to establish his authority," a classmate recalls.

After his ordination to the priesthood in 1920, Montini was sent to do advanced studies at the Gregorian Pontifical University and the University of Rome. A year later, he

pursued his study of canon law at Rome's Ecclesiastical Academy, where he was under the talent-scouting eye of the Vatican's Under-Secretary of State, Monsignor Giuseppe Pizzardo. Named secretary to the Papal Nunciature in Warsaw in 1923, Father Montini stayed only a few months before his health collapsed. Reassigned in the Secretariat of State as a *minutante* (document writer), he settled down to a career of diplomatic drudgery.

Watched and Nourished. One day in 1930, the Vatican Secretary of State, Eugenio Cardinal Pacelli, the future Pius XII, pointed Montini out to a friend and remarked, "I like that tense young man." Pacelli watched and nourished his career, and in 1937 Montini became Deputy Secretary of State for Ordinary Affairs. Montini admired his lean, ascetic superior and worked endless, selfless hours for him. Yet, says one layman who knows Montini well, "he suffered strongly under Pius XII's authority. I saw him cry once out of frustration at something Pius was doing."

In 1952, the Pope elevated Montini to the rank of Pro-Secretary of State for Ordinary Affairs. His opposite number was the older, more experienced Monsignor Domenico Tardini, Pro-Secretary for Extraordinary Affairs. Montini handled the internal affairs of the church, Tardini the negotiations with diplomats accredited to the Holy See. In Rome, however, it was well known that Montini was the man to see on papal business. Montini passed on the Pope's orders to the Curia—a situation that did him no good in the eyes of certain veteran cardinals.

Pastoral Whirlwind. Eventually, the warm relationship between Pius XII and Montini became somewhat strained. One reason, apparently, was their differing views on Italian politics. The new and cooler relationship was apparent in 1953, when neither Montini nor Tardini was among the new cardinals named by Pius. Then, a year later, Pius announced that Montini would become Archbishop of Milan, a post that traditionally carries with it a cardinalate. Pius let Montini go without the expected red hat.

When the new archbishop journeyed northward by train towards Milan, he who had never been so much as a parish priest was taking charge of Italy's most populous diocese. To the surprise of the city, the quiet Vatican diplomat became a pastoral whirlwind. He befriended Milan's business community; yet he was also known as "the workers' archbishop." He visited Milan's Communist districts, and again and again even lifelong Communists would find themselves kneeling to kiss the episcopal ring.

Le Dauphin de Jean. One of John XXIII's first acts as Pope was to call a consistory—and the name of Giovanni Battista Montini led the list of new cardinals. A disciple of Pius, Montini became a close

friend of Pope John's—in France they called him *"Le Dauphin de Jean"*—and, at the Pope's suggestion, he again began to take an active part in the church's diplomatic life.

Invited to the United States in 1960 to receive an honorary degree, he afterwards visited South America, and in 1962 made a three-week visit to Africa, reporting to Pope John on the church's problems on the Dark Continent.

Pope John took a more than usual interest in Montini's fortunes. Montini reportedly had a hand in preparing the papal keynote speech that opened the Vatican Council. He was one of the few cardinals from outside Rome who were given a suite of rooms inside the Vatican for the duration of the first session. He was also asked to celebrate the Pontifical Mass commemorating John's fourth anniversary as Pope, and accompanied the Pope's brothers and sister to John's sickroom during his final illness.

Where Wisdom Leads. Shortly after his election, Paul VI made it known that he hoped to follow the example of his three immediate predecessors: "Pius XI for his strong will. Pius XII for his knowledge and wisdom. John XXIII for his limitless goodness." There is no question of his willingness to pursue the course John took.

In his first public address, delivered in Latin before the assembled cardinals in the Sistine Chapel, Pope Paul announced that his pontificate would be devoted to the completion of the great churchly tasks John began: the Vatican Council; the revision of canon law; "the prosecution of efforts, following the lines set by the great social encyclicals of our predecessors, for the consolidation of justice in civil, social and international life."

Paul VI promised to continue John's work for Christian unity. And he would work also for peace —"a peace which is not only an absence of warlike rivalries and armed factions, but a reflection of the order wished by the Lord, a constructive and strong will for understanding and brotherhood, a never-ceasing desire for active concord, inspired by the true well-being of mankind."

Subtle and Strong. From his words and acts, it was clear that the new Pope had *aperturismo*—the sense of openness to the world. But Paul's *aperturismo* would not be John's. Angelo Roncalli was a warm and intuitive man, with a love of men rather than ideas. Pope Paul, says one Spanish Catholic layman who has worked with him, "is a Gothic priest not only in physical appearance but in spiritual formation. He has a subtle intelligence and a strong hand." Subtle, strong-handed Pope Paul VI will unquestionably differ from John in his stand on the great questions that face his church: theology, church organization and church unity.

As to that most controversial path charted by John—opening to the East—most students of Paul VI's past record expect that he will be more cautious in promoting concord with Communism. "No cardinal is as open in this way as John was," says one intimate. Montini clearly intends to gather as much advice from his prelate friends as possible. Twice so far the new Pope has conferred with Ukrainian Archbishop Slipyi, whose expert knowledge of Communism comes from 18 years of Soviet confinement. Rome does not expect a quick decision on Pope Paul's course.

As one leading Jesuit theologian put it, the symbol of Pope John's brief reign might well be the question mark—a token of the new problems he uncovered and the puzzles he knew the church would have to learn how to solve. Pope Paul VI, if all goes well, might end with a full stop as the sign of his reign: the symbol of answers found and given.



Ruthless Decision

RECENTLY my husband was faced with a decision affecting his career and our way of life as a family. Making the decision was agony, and when it was made we were still tormented by doubts. Then a dear friend passed on to us some words that had been given to her husband years ago by an amateur philosopher. When a decision has been made and the die is cast, then, said this wise man, *murder the alternatives*.

—Mrs. E. S. A.

* * *

On the Air

ANNOUNCEMENT of a church service on a Kentucky radio station: "Sermon: The Importance of Babies delivered by the Rev. Russell Bisnett."

A RADIO news broadcaster reported that the victim of a car accident had "at least two broken legs." —Minneapolis *Tribune*

SHERIFF addressing a television audience in a Florida town: "I will wipe out prostitution if I have to tie up all my men to do it."

ON STATION KABL, Oakland, California: "After this announcement, we will continue with our uninterrupted music." —H. C.

Up With the Lark

There's magic in the dawn's early light that can transform your day

By Marjorie Bitker

"YOU'LL NEVER guess what I did before breakfast this morning!"

I can still hear the triumphant virtue in my mother's tone.

Of course, anyone could have guessed. Snippets of embroidery floss or fluffs of wool betrayed some top-secret handwork for Christmas or birthday; a heavenly aroma, a "surprise" dessert--perfect sponge cake subtly tinged with lemon; ink smears on the fingers, a long overdue letter to a friend.

Father would indulgently disregard the evidence. "Tell us!" he would urge, with a wink at me.

"I suppose," I remember remarking once during those adolescent years when a girl's mother can do no right, "things are better when you do them before breakfast."

"Of course," she replied, seemingly unconscious of my sarcasm.

Now that it is too late, I would like to tell her she was right. Things are better before breakfast. I pity that deprived segment of humanity which clutches at the last instant of slumber and can't utter a pleasant word until after the second cup of coffee.

What is this early morning magic that transforms the most familiar scene, the most workaday task, into something rich and strange and utterly satisfying? Not beauty alone for beauty comes at many times of day. Not privacy alone, for a woman with grown children is often—too

Condensed from Let's See

often—alone. I suspect that the mystique of early morning is underlaid by something primitive: the sense of renewal, the profound impulse of gratitude to Whoever or Whatever has provided another day of life. Stonehenge, that ancient English monument, is thought to have been especially oriented towards the midsummer rising sun.

Few of us early risers these days kneel down to pay homage to the dawn, nor do we chant in unison. Our rites are performed in blessed silence. With the minimum of rustle and squeak, we ease ourselves out of our bedroom, past rooms where the family still slumbers, and find ourselves by a window. What kind of day will it be? Upside-down moon or morning star may tell us, or, in summer, a burnished glow on a certain wall. Transfixed, we behold the accustomed street or garden or field become a work of art, heightened by the chiaroscuro of a Master. At last, thoughts of coffee can no longer be resisted. What are dawn rites without the libation, strong, hot and black? While waiting for the percolator to perk, there is the pleasure of doing some quiet chore—unloading the dishwasher, folding laundry.

Then, bearing the votive cup, we choose a favourite chair to pursue whatever form of pure, uninterrupted enjoyment today's fancy dictates. Perhaps it is last night's newspaper, previously usurped by



spouse or children. How delightful to mull at one's own pace over news and recipes, advertisements and editorials. Perhaps it is some weighty tome. A source of wonder, always, that what was dull and incomprehensible last night comes through so clearly in the morning. Or perhaps just sitting and thinking—to each her own. You note that I use the feminine pronoun. Who is brash enough to deny that it takes a woman to best appreciate the well-earned increment of early-morning time?

On mornings when rain beats against the windows, are we down hearted? Certainly not. Snug in our shelter, we fortify spirit and flesh against the inevitable moment when we must buck the elements. To the ante breakfast brigade, any calamity-of the-day is bound to be less than overwhelming.

Yesterday, for instance, I got up particularly early because I was expecting the painters to do the bedrooms and halls. As every woman knows, painters qualify as a calamity. To compound the threat, fog filled the windows, and from the lake across the park the fog horn bellowed—the paint would never dry! But by the time I had settled down with my coffee the fog was beginning to lift. As I sipped, the sun rose up from the dark fog-bank, concentrating the fires of a million trillion fine summers. To the happy music of pigeons perched in a plump row on the cornice of the roof to the south, I opened my French exercise book and got to work, oblivious of everything else until the steamer, approaching the pier below, tooted a cheery good morning. "*Bonjour, madame,*" I greeted her, marvelling at the Frenchness of my accent. "*Alors!*" said I to myself, for there were still two hours to go, and so many lovely things to do.

Later, as my husband and I sat at breakfast, I heard myself say in a tone of triumphant virtue: "You'll never guess what I did before breakfast this morning!"

His keen gaze rested briefly on my French book, on my ink stained fingers, on the yellow pad on which I had written the first draft of this little hymn of praise.

"Tell me!" he said, indulgently.

I swear I heard my mother laugh.

A CIVIL SERVICE clerk received a document in the ordinary course of business, initialled it and passed it on to his superior for whom it was intended. It promptly came back with a note attached: "This document did not concern you. Please erase your initials and initial the erasure."

—H. C.

"Value Engineering" THE NEW WAY TO LOW PRICES

Report on a new American industrial technique that has been described as "the biggest thing since mass production"

By Lloyd Stouffer

Back in 1947, Larry Miles, a design engineer for America's General Electric Company, walked into his boss's office with a bone-jarring question. "Doesn't anybody here care what things cost?"

Somebody, of course, did. And the idea advanced that day by the design engineer not only shook his own company, but may prove one of the greatest boons to consumers since Henry Ford popularized mass production. What Miles expounded was a technique—now called value engineering, value control or value analysis—that substantially reduces the manufacturing cost of almost any product to which it is applied, without lowering performance. In 17 years, savings resulting from value engineering could be estimated at more than 200 million dollars for the purchasers of General Electric products from toasters to turbines.

One of the first items to be value-engineered was the automatic cold control of a refrigerator. This part, an expensive one, had gone through cost-reduction studies, and the department manager told Miles, "If you can take another nickel out of it, I'll eat my hat!" Presumably he ate it, because the records show that value analysis in 1947–48 eliminated

500,000 dollars a year from the cost of that one refrigerator part.

The technique was applied to other parts. Competitors picked up the ideas, and the result was that refrigerator prices, which had skyrocketed, in 1949 started a sharp downward curve. Today in America a refrigerator costs 40 per cent less than it did in 1947–49—and today's machine is larger, with many added features. Since then, the cost-search practice has spread to hundreds of other manufacturing companies, large and small.

Specialists trained in value engineering develop an enthusiasm that is like a religious fervour. Their professional society, the Society of American Value Engineers (SAVE), has in the last two years increased its membership sevenfold. Courses in the subject are given at a dozen universities. Miles alone has trained men who have passed the techniques on to 6,000 other men. As results fan out from the big companies to their hundreds of suppliers, benefits for the consumer mushroom.

How does their magic work?

The trained VE practitioner, alone or in a team, selects a target—either a high-price tag item, or perhaps some small part which is used in large quantities. He asks three basic questions:

1. **What does it do?** The discipline requires that the answer be reduced to two words, a verb and a noun. A pencil, for example, "makes marks." This breaks habitual patterns, pulls the thinking back to fundamentals, puts the emphasis on function rather than on "the way we've always done it."

2. **What does it cost?** The answer should already be known, but frequently is not. It is often an eye-opener.

3. **What else would do the job, at what cost?** This calls for a brainstorming session in which alternatives may be suggested. These are then evaluated, developed, refined. Thus, where conventional cost-cutting tries to economize on things as they are—pare off a little weight here, simplify a part there—value engineering starts from scratch and approaches each product as if it had never existed. Different materials and methods suggest themselves, and cost reduction is almost automatic. "On the average," says Miles, "a quarter of all manufacturing cost proves unnecessary—or *half*, if it's a new rush product."

To see how value engineering works, attend a seminar for executives of oil well service firms conducted recently by William McMurry, value-control administrator for the Military Electronics Division of Motorola, in Scottsdale, Arizona. For study, McMurry is given a cigar shaped aluminium tube with slots in the side. The oilmen tell him that it's called a "bull plug."

What does it do, he asks. It *protects detonators* sent down oil wells to perforate the pipe and let in oil.

What does it cost? *Seventy-nine cents.*

How else could you possibly convey and protect a detonator? Various suggestions are made. One student suggests: *place it in a paper bag.* Ridiculous? Yet that is the suggestion which, with a slight refinement, was actually adopted. Tests showed that a cylinder of heavy, impregnated paper would do the job just as well as the aluminium tube. The paper tube cost seven cents, a reduction of more than 90 per cent —and it is now a standard item in the oil-well servicing industry, which uses bull plugs by the thousand.

At the Pentagon, the U.S. Assistant Secretary of Defence Thomas Morris has an exhibition of defence items on which savings as high as 90 per cent have been made through value engineering. Examples:

• An electronic mechanism is required to open and close the 50-ton maintenance housing over a silo that holds a Minuteman missile. These mechanisms, as originally designed, cost 550,000 dollars for each formation of Minutemen. Investigation turned up a commercial "off the shelf" hydraulic mule, used for routine hauling jobs, which would do this job effectively—at a cost of 80,800 dollars per Minuteman formation.

• The military version of the U.S. Electra prop-jet transport plane doesn't need external fuel gauges (although ground crews still find them important for quick-turn-around commercial flights). Each gauge costs 50 dollars, and there are eight tanks on each plane. One wooden dipstick that costs 12 dollars now does the job of 400 dollars' worth of gauges.

• A dust cap applied to numerous electrical fittings on the Minuteman missile was designed as a threaded metal fitting, with a chain attached. A change to a plastic clip cap reduced cost per cover from six dollars to two cents. This amounts to a saving of 73,000 dollars a year—and the idea will be extended to other weapons systems.

When men give their imagination free rein, ideas come from anywhere. An employee at the Martin aircraft company noticed that a "heat sink" clip, costing one dollar 35 cents, which is applied momentarily to "bleed off" damaging heat from a transistor during soldering of a connecting wire, looked very much like the clip his wife used in setting her hair. The hair clip costs two cents. It now does the job for the Martin company at a saving of 1,330 dollars a year.

Direct consumer benefits are mounting. At the Ford Motor Company, for example, as at other American car firms, there is now a value-analysis "tear down" room where competitive cars are laid out, part by part, for comparison of design and cost. This is a game for big stakes. To a company that produces two million vehicles a year, a

saving of even a dollar per car adds up.

Such an analysis at Ford in 1960 resulted in a redesign of the brake master cylinder, to save five ounces of metal, two bolts, and one and a half minutes of casting, machining and assembly time. Performance was superior. The saving was 45 cents per part—which in less than two years amounted to 1·5 million dollars. Value engineering, industry wide, has helped to keep American car prices virtually unchanged for five years while quality and performance have gone up.

In the last ten years, the growing U.S. importation of well-made, low-cost goods from Europe and Japan has presented a serious challenge to American industries, even putting the future of some in doubt. By 1962, for example, Japanese transistor radios had captured 55 per cent of the U.S. market. Several American manufacturers began having parts, or entire radio sets, made in Japan under their own brand names. General Electric, instead, met the challenge by putting its radios through another intensive round of value analysis. The result: today GE radios are not only underpricing the Japanese in many cases but are actually being exported to Japan.

When the same sort of competition loomed in small television sets, the company was ready. By designing from scratch, eliminating the conventional chassis, and mounting components on printed circuitry all round a thin picture tube, the company was able, with value engineering paving the way, to produce a 12-lb. miniature portable television set to sell for less than 100 dollars—underpricing, with an 11-inch tube, a popular Japanese eight-inch set.

Can the Japanese beat that? It's possible. A number of Japanese technicians have recently been studying value engineering in the United States.

Miles's textbook on the subject has been published in Japanese and is being translated into Dutch and German. From all this, the consumer will be the biggest gainer.

Booby Prize

THE children at the school prize-giving had been arranged according to height—shortest first, up to the tallest. But the pattern was broken, I noticed, by the leader, a gangling youth who looked a head taller than the rest. "Why is he at the front?" I asked the young girl beside me. "Is he head boy?"

"No," she whispered. "He pinches." —H. S.

This famous Swedish botanist first brought order to the chaotic world of plants and flowers



Long Live Linnaeus!

By Donald Culross Plattie

My favourite character in history—a man whom I dare claim as friend, despite time's gulf—is Carolus Linnaeus. When his century—the eighteenth—opened, natural history was a bookish muddle. Into this cluttered obscurity the hearty young titan came striding, to throw open the windows of the mind. In nature itself he discovered order and meaning, and out of chaos created organic system. His hand upon his science brought forth a harmony proclaiming like an anthem the oneness of all things under God.

When Linnaeus was born in 1707 in a country curate's tiny cottage, Sweden was largely a wilderness sprinkled with farms and clearings and glittering lonely lakes. As soon as the boy was old enough he walked the woods and fields with his nature-loving father, who pointed out the flowers, their roots and seeds, and fixed in the child's memory the Latin name of each plant. The teaching of Pastor Linnaeus was original. In those days few scholars looked to nature to find out about a plant or animal; instead they looked in a book, preferably one written by a Greek 2,000 years before.

That is why old Professor Celsius, of Uppsala University's faculty of theology—and a botanist himself—was astounded, one day in 1729, to discover a student carefully examining some flowers in the neglected botanical garden. The boy was obviously poor; his clothing was threadbare, his body thin. But his brown eyes sparkled as the professor opened a conversation which revealed the lad's astonishing botanical knowledge. Impressed, the kindly old theologian invited him to his home, clothed him, fed him and gave him the run of his library.

His reward was the present of something this boy of 21 had written, the result of long and close study of flowers. He called it, quaintly, *Floral Nuptials*. It widened the old professor's delighted eyes. For here was clearly stated the simple but scarcely known fact that plants are sexed. A great deal of rubbish had hitherto been talked, such as that plants "rid themselves of pollen to purify the sap." Linnaeus explained that the pistil is the female organ of a flower, containing the ovary with a womb-like cavity for the seed to occupy after it is fertilized by the pollen, which is shed from the stamens, the male organs. Taking a bee's-eye view of the flower, Linnaeus explained with tender poetry but much truth that "the actual petals of the flower contribute nothing to procreation, serving only as bridal beds which the Creator has so gloriously arranged adorned with such noble bed curtains and perfumed with many sweet scents." This statement of the sexual nature of plants opened a new age in science. The Linnaean Age, we call it—a flowering of discovery and understanding whose fruits we still reap today.

Pleased by his protégé's startling tribute to the wisdom of God, old Celsius hastened to his friend Professor Rudbeck, the chief scientist at Uppsala. And Rudbeck, seeing genius, insisted that Linnaeus come to live with him. Into the young man the older one poured the pent-up learning of a lifetime, broadening Carl's mind, exciting his imagination. Between them, they planned what was to prove the most momentous scientific expedition that had ever been launched.

It was only a young man riding forth, one spring day in 1732, headed for the wilds of Sweden's northernmost province, Lapland. But it was the first extensive field trip in the history of science. Linnaeus's equipment consisted of a measuring stick, telescope, magnifying glass, knife, fowling piece, paper for drying plants—and above all a mind as open and sparkling as that spring morning, described by the young adventurer thus: "Nature wore her most delightful aspect. The winter corn stood half a foot high. The birch, the alder and the aspen had begun to put forth their foliage. The lark was my companion, quivering in the air as he spun out his *tirrilee tirrilee.*"

Six months later to the rooms of Uppsala's Scientific Society strode a wiry fellow tanned leathery with Arctic wind and midnight sun. Linnaeus had starved on icy fells, lived on maggoty fish, boated on raging streams, climbed perilous cliffs, been shot at by suspicious Lapps. But he had seen the wide-eyed Arctic wildflowers that must grow so close to the tundra the gale's sharp knife cannot skim them off. He had watched the Arctic birds at their nesting, seen their bridal plumage, found their eggs and chicks. He had explored the complete life cycle of the reindeer, on which the Lapps depended for food, drink, clothing, shelter. He had kept his journal by flickering campfires, in the reek of wild men's huts, under the shelter of his beached boat. And he had amassed more firsthand knowledge of living nature than any scientist before.

His mineral specimens proved to Sweden the wealth of her northern soil. He warned of the woeful state of the Crown forests, which were wasting away through fires, disease and insects. (Today Sweden is a model forester, but only after Linnaeus first roused his country to its losses.)

It took three lean years to harvest from his notes and memory these rich reports. Meanwhile, talk of him spread, and Sweden began to realize that she had a great son in Carl Linnaeus. He was asked to make a survey of the province of Dalecarlia, this time with assistants, and expenses guaranteed.

The bells of the new year, 1735, were ringing when, his survey of Dalecarlia ended, the 28-year-old Linnaeus entered as a guest the home of a local notable, Dr. Moraeus. There he danced with the doctor's daughter, Sara Lisa, and promptly decided that here was the wife for him. But he was poor, and rich Dr. Moraeus set conditions to the marriage: Carl must go to Holland, earn a physician's diploma there, return and set up a successful practice. On his part, the doctor promised to keep Sara Lisa safe from other men's claims, along with a good dowry drawing interest.

For three and a half years Sara Lisa waited the return of her suitor,

and dull years they must have been for her. Linnaeus, though, was working like an ant. He had arrived in Holland with the manuscripts of eight works. The one that astounded the Dutch scholars was that which set forth the Linnaean "sexual system" of identifying any plant by the number and position of its male stamens and female pistils. Until then plants had been classed together because they were thorny, or fleshy, or had been arranged alphabetically, or had been classified according to their supposed action on the human body. All these "systems," of course, fell down absurdly. But that which Linnaeus had established as inherent in the flower is, however modified, the one still used by botanists today.

The system was devised to work for the flora of any spot in the world. Goethe was to find it one of the greatest delights of his giant intellect. When Linnaeus visited Oxford, Professor Dillenius became so absorbed in the Linnaean system that he offered the Swede half his own salary if he would remain and teach.

In vain, as was many an offer. Linnaeus could have gone as the guest of the Dutch to the Cape of Good Hope or Surinam, with opportunities to collect and describe for the first time the wealth of new species of plants and animals. But Sara Lisa was never absent from his thoughts, and he worked hard at his studies and to get his manuscripts printed. At last, with his diploma and his published books under his arm, Linnaeus returned to set up practice in Stockholm, a man unknown and unsought as a physician.

He went into the slums and took up arms against those grim diseases so often linked with poverty—tuberculosis and venereal disease—treating "hopeless" cases and often curing them. Eighteen hours a day was not too much for him to work. Presently he was appointed head physician to the Swedish Admiralty, then physician to the Queen. He was named president of the Academy of Sciences.

Sara Lisa was fairly won, and in June of 1739 he led her from the altar. Soon after, he was reunited with the other love of his life, receiving the professorship of botany and medicine at Uppsala.

So here Linnaeus was back in what had been Professor Rudbeck's house. Now he was the master of it, and of the botanical garden around it—a shrine which Sweden honours today. With flowers arranged according to his system, as living example to his students, this garden became the most richly stocked in Europe.

Admirers from all over the world sent him plants for it; some are still living, such as the golden mass of a Siberian flower which was grown from seeds sent by the Tsarina of Russia. The Swedish King presented him with a splendid collection from tropical Asia. Travellers everywhere sent him exotic specimens.

At Hammarby, the smiling country place to which Linnaeus and his family removed in summer—still today breathing the spirit of his tranquil, happy life—Linnaeus taught private pupils from many lands. The poorer of these he kept at his own expense. Many became famous in their own right in later years.

The plants they sent back to their master piled up and up in the herbarium where Linnaeus probed the secret of flowers that bloomed in faraway places. For he was writing a book that would describe all the plants and animals then known in the world. Like Adam in the Garden of Eden, he had first go at naming scientifically everything alive.

The binomial (two-name) device he invented is simple. All roses, for example, are *Rosa*—the sisters being *Rosa gallica* (the French rose) or *Rosa odorata* (the fragrant tea rose) and so on. Linnaeus named everything right up to *Homo sapiens,* establishing orderly groups and sub-groups. Perceiving how each living thing was related to the next, he revealed the noble and beautiful order that is in nature. The book in which he had as a very young man first charted this grand and lucid system had been 14 pages long; the 12th edition he published in 1768 was 2,500 pages.

But it was nature herself, not the skeleton of system, that Carl Linnaeus loved. Though he never left Sweden again, once he was established at Uppsala, he journeyed with a seeing eye about the woods and fields of near-by Hammarby. The years did not dim his curiosity and genial serenity. Still bright is many a lovable glimpse of him—lecturing to his students with his little girl on his knee, taking his dog into the church pew with him, catching crickets because their music cured his insomnia. Or leading, with his quick firm step, those field trips which were so popular that monitors had to be appointed to keep order in the crowd.

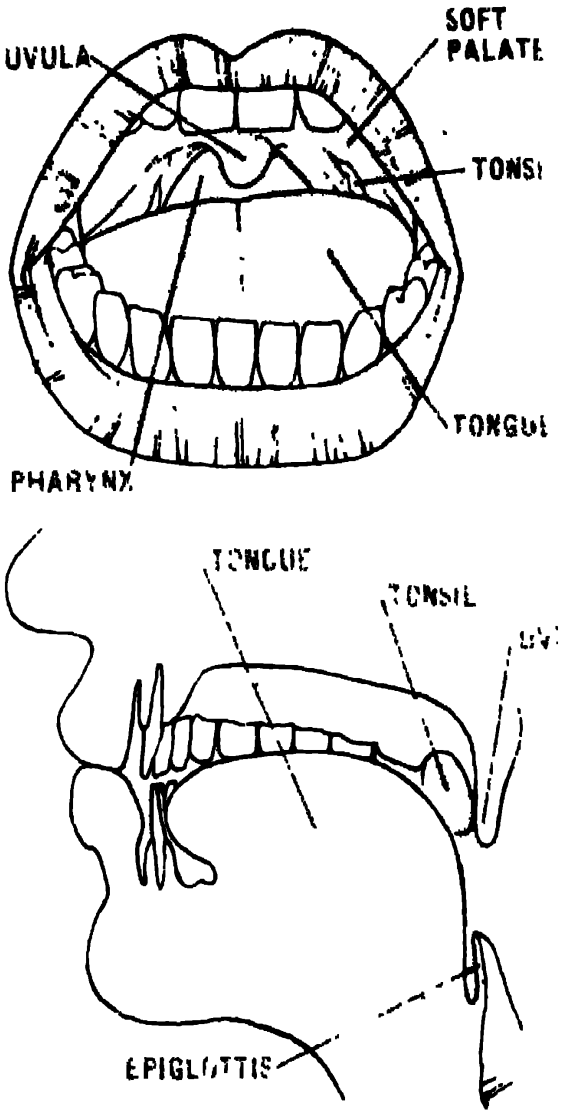
So festive were these occasions that when his students marched back with him through the streets of grey Uppsala they made the walls ring with French horns and kettledrums, until they disbanded at his door, raising the shout of *"Vivat scientia!"* (Long live science!) and *"Vivat Linnaeus!"*

And live he did, threescore happy years and ten, to be laid away at last, with a tolling of bells and blazing of torches, in sombre Uppsala Cathedral. He lived on, too, as a milkweed plant lives in its floating seeds, in the students he had trained who dispersed far over the earth, to carry his science and infuse in others his joyous spirit. He lives for you and me in the great chart of nature which he drew for us so that, starting forth any morning from your own back door, you may discover in her newly comprehended wonders a shining Lapland of your own.

SPEAK UP, MAN!

Expert advice on how to give yourself a more pleasing and effective voice

Parts of the mouth



By Stella King

Over 75 per cent of the communication between one person and another is by talk; yet most of us are careless talkers. We slur and mumble, we drop letter sounds and whole syllables. Many of us talk so unattractively that we fail to convince our listeners. Only about one person in 20 has a naturally pleasing and effective voice, say the authorities, yet almost anybody can cultivate effective speech.

Realizing the importance of the subject, Britain's Institute of Directors has engaged a voice production tutor to train executives and salesmen to express themselves orally. She is Mrs. Heather Kay, a former lecturer at the London Central School of Speech and Drama.

Another acknowledged expert is John Snagge, chief of the announcers and Head of Sound Presentation at the BBC for 24 years. In that capacity he selected radio announcers and supervised their training.

Both he and Mrs. Kay deplore the exaggerated "Oxford" or "Kensington" accents and the

Adapted from an article by Paul Kearney in Contemporary

pedantic style taught by old-fashioned elocutionists. They teach Standard English pronunciation. There is nothing wrong with dialect, they both assert, but it cannot always be readily understood.

You and your family can practise many of the valuable techniques which John Snagge and Heather Kay, and other speech teachers, pass on to their students.

Between them, Snagge and Mrs. Kay have made thousands of speech recordings of their students, who are invariably shocked when they hear their own voices for the first time.

One university professor, after rehearsing a lecture he was to give on the BBC, listened with rising indignation to the play-back of his recording. "Who is that pompous ass reading my talk?" he demanded.

Wary about deciding when to allow pupils to listen to their recordings, Mrs. Kay says, "sometimes the shock is almost traumatic and they become frightened of speaking at all."

Many businessmen talk as if they were declaiming a business letter or reading a railway time-table, and if their speech is in any way artificial it is apt to let them down at the wrong moment.

"Correct pausing is most important," says Snagge. Bringing attention to every comma and full stop makes a speech jerky and meaningless; and if there is no variation it becomes flat and monotonous. But a pause before registering an important point is tremendously effective.

Some speech habits change with time: a generation or so ago it was fashionable to pronounce "cross" as *crawss,* "off" as *orf* and "girls" as *gels.* Says Snagge: "Education has nothing to do with good speech. At Eton [the famous English public school] people tend to talk in a lazy and affected way and never finish a word-ending. 'I had a wonderful week-end,' comes out as, 'Harawonerfulweeken'."

A good way to counteract this fault is by reciting these lines from Gilbert and Sullivan:

"I am the very model of a modern
Major-General,
I've information vegetable, animal and mineral . . ."

People tend to speak several tones too high; in women, a contralto voice is the most pleasant to hear. "A string orchestra with a cello makes a nice smooth sound," explains Snagge. "Brass trumpets hit you smack in the eye although technically no louder."

Says another speech expert: "The cello's deep rich tone comes from its long thick strings and its large, hollow body. People also have strings, their vocal cords; and resonating hollows, the spaces in the throat, mouth and nose. It's easy to lengthen and thicken these strings and to enlarge the resonating space for deeper, richer tones."

"It is important to relax," declares Heather Kay. "The three resonators should not be compressed. Bad tone, often caused by a clenched jaw, resonates in the wrong place and is ugly and ineffective." To correct this fault, Mrs. Kay recommends that you look in a mirror when you speak.

You'll probably notice that there's not much movement of your jaw or lips. This may be useful to a ventriloquist, but for you it produces only high pitch, strained vocal cords and disagreeable sounds.

Now, talk again, but this time open your mouth *wide* and move your lips *out, vigorously*. You'll hear a deeper, richer voice—stronger and more resonant.

What happened? When you opened your mouth more, you increased the size of your resonating cavities and relaxed your vocal cords. They became looser and thicker. Remember the cello? The larger the cavity the deeper and pleasanter the tones. And when you moved your lips out, you lengthened the cavity and that, too, helped to produce lower tones.

"People who are unused to opening their mouths feel that they are 'mouthing,'" explains Mrs. Kay. "Some think that the space feels big enough for a tennis ball. But you should just be able to get two fingers between your teeth when saying a word like 'harm.'"

One authority suggests that whispering is the ideal remedy for the lazy tongue and the stiff upper lip. You can't make people understand you in a whisper unless you open your mouth, extend your lips and keep your tongue moving actively.

Beyond these basic principles here are nine rules for better speech.

Control breathing muscles. Don't take a great gulp of air and let it out in gusts. And don't miss taking a breath when you can. Speak in short phrases. Practise control by saying all the days of the week, slowly, using one breath; space them out so that the same amount of air is used for each word. Then try the same thing repeating the months of the year.

Work at Vowels and Consonants. Here are the vowels in a common word: -e-e-o-e. Here are the same word's consonants: t-l-ph-n-. A glance at the latter shows that the word is "telephone," which you would hardly guess from the vowels alone. The moral is: if you don't want your listeners to have to guess what you are saying, let them hear the consonants. Say "gover*n*ment," not "gover'ment," "twen*t*y-one," not "twen'y-one."

All the vowels are *voiced* sounds, requiring vocal-cord vibrations. If you open your mouth and move your lips, the vowels will add music to your speech. Just try pushing your lips forward when you say "u"; then repeat it with your lips stiff and barely parting. The first is a musical note; the second, a

grunt. Vowels often need attention. "How" should be pronounced as *hu-oo;* not *hee-ow*, or *ha-oo*.

Alexander Graham Bell, inventor of the telephone and himself a great voice authority, once wrote: "Consonants give intelligibility to speech, but vowels give beauty of utterance. Consonants constitute the backbone of spoken language—vowels the flesh and blood. You cannot do without either."

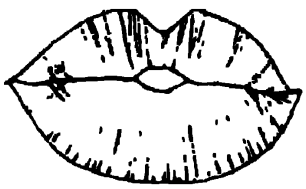
Don't talk through your nose. Nasality is a common flaw, often caused by the soft tissue at the back of the throat not working. This soft palate should be raised for everything except *m, n, ng,* which are nose sounds.

Tension is often part of the difficulty. If the back neck muscles are tired they can have a disastrous effect on the voice. Relax the muscles of the neck and jaw.

Press your lips on b, m, p. A helpful exercise is to repeat: "Ber, ber, ber," or say alliterative phrases such as, "Poppy poo-pah," or "Betty Botter bought some butter."

-Positions of lips-

'oo



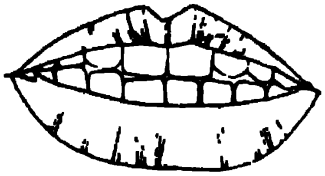
Lips rounded and pushed forward

'b' 'm'



Lips pressed firmly together

't' 'd'



Tip of tongue up behind teeth

Watch that s. It is easy to get into the habit of saying a sibilant *s,* with a distracting whistle; or to pronounce it casually as *sh*. These faults can be corrected by saying "sun" as *tsun,* over and over again—then dropping the *t*. To say *s* properly your tongue tip should shoot air between your teeth.

Tongue up for t and d. The tip of your tongue should be pointed to come against the roof of your mouth, behind your teeth, when saying these consonants Slurred speech often occurs because the tongue resembles a flabby leaf. As a muscular exercise, put your tongue out and point it in several directions in turn.

Beware of the unwanted r. A common fault is to introduce an *r* where it does not belong. "I sorra man," instead of, "I saw a man"; or "Australiarrand New Zealand," instead of "Australia and New Zealand." But give value to the *r* when it is there. It is correct to say "Westminsterrabbey," for "Westminster Abbey."

Sit or stand naturally and comfortably. A desiccated academic voice is produced when your head is too far forward, preventing correct vibration in the resonators. Standing to attention is death to voice production. Keep your feet a little apart, with your weight slightly on your toes. Your back should have a natural curve and your shoulders be relaxed.

Keep it slow and low. Speaking up doesn't mean top notes; and the fast talker is always suspect. Even if he's honest he's hard to follow. So speak deliberately, but with enough change of pace to avoid monotony.

A copybook found in an Egyptian tomb contained this maxim: "Make thyself a craftsman in speech for thereby thou shalt gain the upper hand." This is as true today as when it was written 3,000 years ago.



Survival of the Fittest

VISITORS TO Beirut, frightened by the speed and nonchalance of Lebanon's taxi-drivers, are surprised to learn that the accident rate is low. "It shouldn't surprise anybody," explained a cabby. "All the bad drivers are now dead." —*Express*, Beirut

* * *

Master Teachers

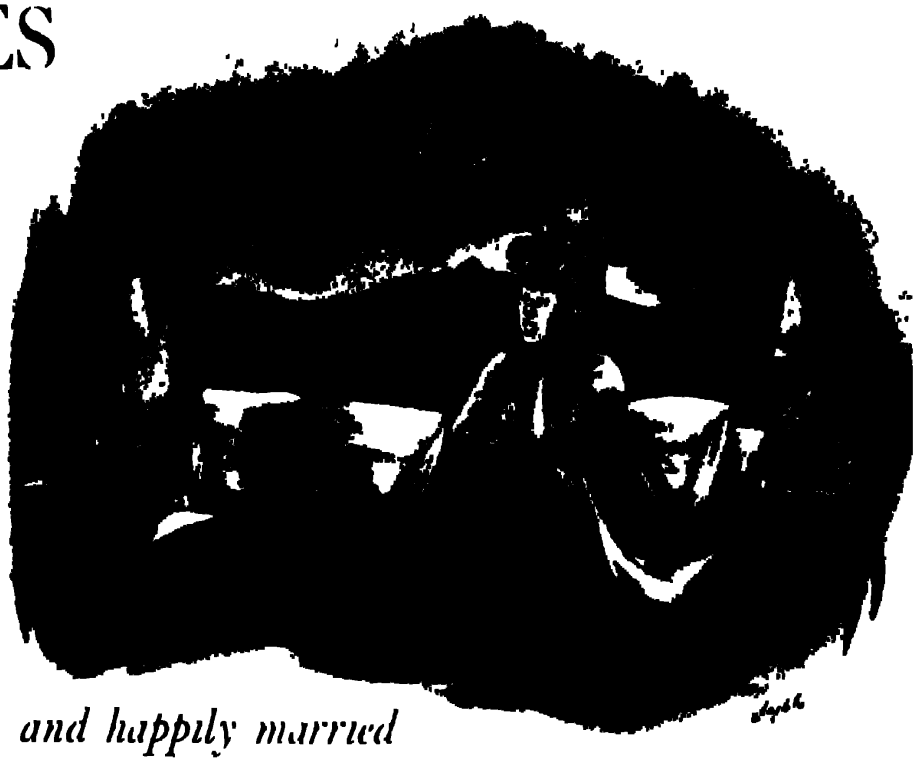
A SENSE of intellectual excitement reigned in my favourite university professor's classes. Other professors, students and sometimes graduates turned up to see him perform. A friend remonstrated with him after one of his public lectures: "That was brilliant, but aren't you afraid it was over their heads?"

"I aim it," he replied, "where their heads ought to be." —L. C. R.

ROBERT FROST'S first assignment to a class of teachers was to read "The Celebrated Jumping Frog of Calaveras County," Mark Twain's story of the frog that failed in a jumping contest because he had been pumped full of shot. When the class next assembled they were mystified; they didn't understand what this story had to do with a course in education.

Frost explained the story was about teachers. "There are two kinds of teachers: the kind that fill you with so much shot you can't move, and the kind that just gives you a little prod and you jump to the skies."—M. P.

WARNING TO WIVES



An armchair psychologist– and happily married humorist—has devised a simple test to determine your "divorce potential"

By Art Buchwald

In recent years, psychiatrists have discovered that every married couple has a "divorce potential." I'm happy to report to wives that there is now a test you can take to see how high *your* divorce potential is. Read the following descriptions of familiar situations. If any of the handlings of the situations fits your case, give yourself ten points for each. If you get up to 70 points, phone your lawyer.

1. It is after 1 a.m. Your husband has had a tiring day. You turn off the lights, and then you say: (a) "Why are the Chinese and the Russians arguing about Communism?" (b) "My cheque-book doesn't balance with my bank statement." (c) "Do you know what Betty Wheeler told me about Ann Sutherland?" (d) "I think I hear someone moving about downstairs."

2. Your husband has just come

Condensed from McCall's

home from the office, and he is ready to make himself a drink when you say: (a) "I'm glad you're home. Someone has to pick up Jennifer at Ann Lindsay's house." (b) "Would you be a dear and carry Joel's bed down to the basement?" (c) "I told a man to call round and see you about the roof." (d) "I forgot to order any tea."

3. Your husband is about to make a big deal at his office when you phone him and say: (a) "The cleaner's destroyed my new blue dress. I wish you would phone him and give him hell." (b) "The assistant wants to know whether we want a blue mattress with a pink spread or a pink mattress with a blue spread." (c) "What's the name of the man Jack Brody said will sweep our chimney for practically nothing?" (d) "I just wanted to hear your voice."

4. After a party you say to your husband: (a) "Jerry Hammond says you're getting fat." (b) "You didn't dance with me once this evening." (c) "Who was that silly woman who kept giggling at all your old jokes?" (d) "I don't know why you always want to go home just when I'm having fun."

5. Your husband asks where the car is. You reply: (a) "You know the traffic lights in the main street? Well, I thought they were still green, and——" (b) "The man at the garage said you have to put oil in the car to make it run." (c) "I think it was taken away by the police when I parked in front of the supermarket." (d) "I lent it to my brother while he is looking for a job."

6. Your husband is playing poker at home with his cronies, and a large sum is in the pot. You come in and say: (a) "Would anybody like some chocolate fudge?" (b) "My goodness, that's a lot of money!" (c) "Don't pay any attention to me. I'll be quiet." (d) "Who's winning?"

7. Your son has just failed in algebra, and you say to your husband: (a) "I told Joel you'd go and see his teacher tomorrow morning." (b) "I told Joel you'd correct his homework every night for a month." (c) "I told Joel you'd give him a beating when you came home." (d) "You talk to Joel. I can't."

8. Your husband is listening to a football match on the radio. The score is two all, with two minutes to go. You enter the room and say: (a) "Which of these two dresses should I wear tonight?" (b) "The fuse in the kitchen has blown." (c) "Would you make the salad before the guests come?" (d) "We've run out of bread."

9. You have a fire in the house, and the upper storey is destroyed. Your husband says, "Well, at least we're insured." You reply: (a) "I forgot to pay the premium last month."

You may forget the other three answers. That one will do it. You can go ahead and get your divorce.

FANFARE for the World's Fair

Roll up for a conducted tour of the greatest show on earth—which opens in New York this month

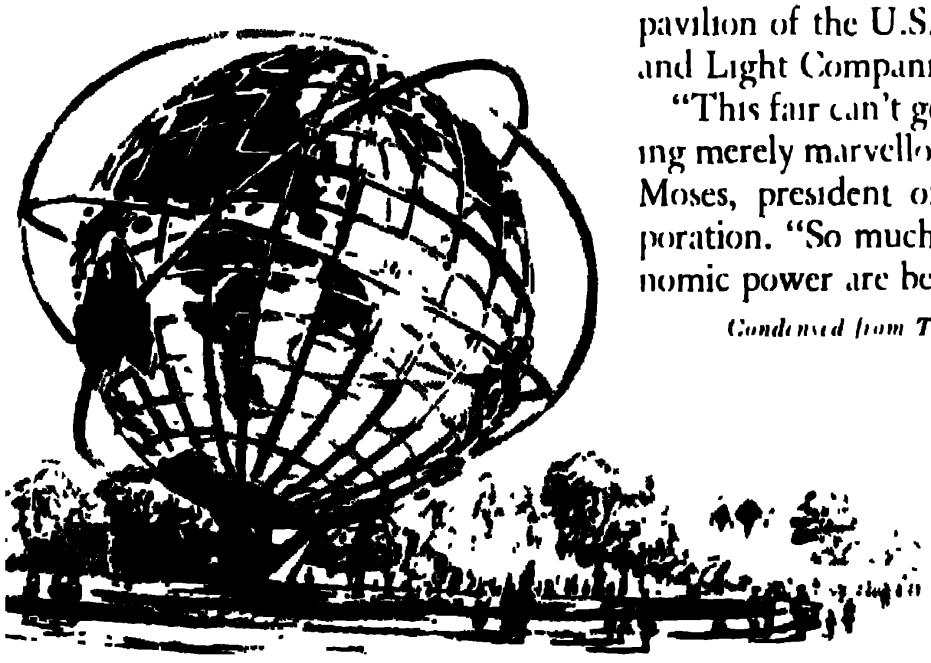
By Ira Wolfert

The most brilliant electric lights of all time are installed between the bases of three 120-foot-high pylons in New York. Developed to simulate the sun in space research, each lamp is less than three inches in diameter and 19½ inches long, yet produces a light as bright as 8-775 million hundred-watt bulbs. Combined, the 12 searchlights will add up to 12,000 million candlepower. Reflectors around them will concentrate this light into a single beam and direct it upward.

As night falls on April 22, jets of air will start streaming on the lamps to blow away their heat, and the lights will be turned on for the first evening of the New York World's Fair.

The fair will run until October 18, 1964, then be opened again in 1965 from April 21 to October 17. And every night of this run the beam of light will shine heavenward from the "tower of light" pavilion of the U.S. Electric Power and Light Companies.

"This fair can't get away with being merely marvellous," says Robert Moses, president of the Fair Corporation. "So much talent and economic power are being poured into



Condensed from The Diplomat

this square mile of ground that if it doesn't produce the *most* marvellous fair ever, it will be a disappointment—like holding an Olympics without breaking any records."

Forty-eight nations (plus West Berlin and the crown colony of Hong Kong) will be represented.

Russia had reserved for itself the largest space in the International Exhibition. When it backed out, the ground was taken over by one of the poorest nations in Europe—Spain. Japan contracted for two pavilions. There will be exhibits by the U.S. Government, 26 states and more than 80 industries representing more than 300 companies. The exhibitors and concessionaires have erected 150 different pavilions and will spend about Rs. 250 crores to put on shows in them.

Man in his bewildering variety—that's what the shows will present. For example: the General Electric Company is demonstrating controlled nuclear fusion. In this first public unveiling of what scientists predict to be the most promising power source, fair visitors will watch fusion liberate pure energy from deuterium gas at a temperature of over 20 million degrees F.

From St. Peter's Basilica in Rome comes quite another kind of transcendent human achievement: the Pietà by Michelangelo, finished seven years after Columbus's discovery of America, depicting in white marble, slightly larger than life-size, a crucified-Christ figure lying in the arms of His mourning mother. The Pietà will be viewed from four levels. The three lower levels are moving platforms that take those who want merely to look at the statue past it slowly and silently. The top level is motionless, for those who want to linger in contemplation of this profound study.

The space manufacturers are showing a full-sized space station and two orbital vehicles to simulate the rendezvous in space that will have to be accomplished for the journey to the moon. The Parker Pen Co., in conjunction with the People-to-People programme, will demonstrate a computer stocked with personal data on one million friendly souls Tell the computer your interests and it will leaf through its innards for a congenial international pen pal and hand you the name and address printed on a special overseas postcard. Wisconsin is showing the biggest cheese ever made, a cheddar seven feet high, nine and a half feet in diameter. Montana--a million dollars in gold nuggets.

One unusual feature of this fair is the number of exhibits being staged by professional showmen. To see what a showman can do, I went to watch Raymond Lester complete an enormous scale model of the city of New York. It has taken two years, cost Rs. 29 lakhs and was painstakingly worked up from more than

50,000 aerial photographs. On a floor 180 feet long, 100 feet wide, it shows every street in the five boroughs, every river and bridge, every window in every one of the city's 835,000 buildings. It even shows the 1,000 vessels that can be found plying the harbour or tied up at the piers on an average day, all on a scale of one inch to 100 feet.

Usually such displays, however grand and lavishly detailed, are still just toys you're not allowed to play with. But Lester is letting the audience play with his toy. It works like this: You sit in a four-passenger car suspended on overhead rails. There is no sensation of movement until suddenly clouds start scudding past the windows. The clouds break and you are as in a helicopter flying at 2,000 feet over lower New York bay. Actually, you are only 30 inches up, but because the Statue of Liberty below you is little more than three inches high, the Empire State Building only 14 inches high and everything else in exact proportion, the illusion is perfect.

A tape recording explains the points of interest as you take a leisurely eight-minute "flying" tour round the city. As you approach La Guardia and Kennedy airports, beacon lights flash and planes take off and climb by you in the distance. Your own "helicopter" climbs, and the city falls away beneath you steadily until at last you can see it all from one end to the other. Then your helicopter lands you on a balcony and as a 15-minute recording tells the city's life story you watch one of the greatest spectacles on earth—New York going from dawn to dusk, then to night and dawn and day again.

Another unusual feature of the fair is the amount of space devoted to religion—a total of seven acres and eight pavilions. Here will be found the Mormons' Great Tabernacle Choir from Salt Lake City, a fourth-century carving that is one of the earliest known studies of Jesus, a Gutenberg Bible, the cross charred in the bombing of Coventry Cathedral, a computer used in translating the Bible into unwritten languages.

No pavilion is allowed to occupy more than 60 per cent of its site; the remaining 40 per cent must be landscaped. Since all the giants are going all out in this one, the competition to impress visitors is fierce. "As one of the smaller exhibitors we were assigned a limited amount of space," I was told by Walter Dorwin Teague, designer of the Gas Companies' exhibit. "We achieved the effect of spaciousness by running our 40 per cent of landscaping right through the building as well as round it." This "little" exhibitor is spending nearly Rs. 3 crores for his show!

The fair will be easy on your feet. You will ride past, over or under practically everything Out of doors, you drive from exhibit to exhibit in glass-topped sightseeing buses, in open-sided trailer trains, or in a tiny four-passenger "taxi." You can even

travel high above all the exhibits for a panoramic view from a Swiss sky ride or around the perimeter of the Lake Amusement Area aboard an air-conditioned two-car train.

Indoors, you ride standing on moving paths and stairways, or sitting in cars, floating armchairs and space ships. At General Electric, the stage rides round you, while at IBM you ride in the theatre itself, which is on rails.

At the 1939 New York World's Fair, General Motors' Futurama—a drive over the highways of the future—was the smash hit, playing to an average of 28,000 people a day. In the new Rs. 18 crores GM Futurama, the audience (up to 70,000 a day this time) will ride around the world as it *could* be if the fair's theme of "Peace Through Understanding" is achieved and scientists and technologists can devote their energies exclusively to peaceful developments. "No fantasies, nothing that can't be backed up with hard facts as a definite, practical possibility," came the order to the designers from the General Motors' Chairman.

What a world you'll see in GM's crystal ball! With underwater drilling already accounting for a substantial part of the world's oil supply and diamond miners taking an average of 2,500 carats a day from the floor of the ocean off South Africa, the underwater world, more certainly than space, is man's newest frontier. So the Futurama audience rides under the sea. New ways of underwater exploring, mining, farming and living are shown. Trains of nuclear-powered submarine tankers fill up at wells on the ocean floor, speed to a seashore refinery, unload and return without surfacing.

Then the audience comes up to see what the future is doing to cope with its enormously increased population. They see a jungle cleared by a tree cutter that uses a laser beam as a saw. Behind it is a five-storey-high road-building vehicle as long as three football fields. It makes a multi-laned concrete highway while you wait. The front end levels the cleared ground, the middle grades and installs a steel foundation, the hind end covers it with slabs of cement, plastic and other materials that the monster itself forms while the trucks that feed it raw materials drive up on the highway it is laying.

From this strange scene the audience rides on to a desert farmed by remote control: the mineral-rich desert soil is irrigated with desalted sea water, its flow regulated by moisture-sensing devices planted amid the crops. With push-buttons in his home at the edge of the fields, the farmer mixes fertilizers into the water and directs the vehicles that plough, seed, cultivate and harvest the land.

The U S. Government has a Rs. 8 crores pavilion where a Cinerama film tells the story of the development of the United States, using 30

projectors and 132 screens in what might be called a drive-along theatre. The audience, seated in open-topped buses, travels along with Columbus, with the settlers, with the westering pioneers and the immigrants, while all around cinema screens move aside, go up and down, even form a tunnel for the buses to drive through.

Four other exhibitors have turned to one of Hollywood's most valuable natural resources, Walt Disney. Visitors to the Pepsi-Cola pavilion will be taken on a Disneyland-type tour of the world, and visitors to the Ford pavilion on a Disneyland ride through history. And both General Electric and the State of Illinois will use lifelike figures animated by Disney.

At the Illinois pavilion, a figure six-feet-four-inches tall, with a face of such simplicity that it is beautiful, constructed with the help of a life mask of Abraham Lincoln, will rise, step forward and make one of the poet-President's immortal addresses. Disney says, "I'm doing everything I know to give the audience the sensation of being in the crowd the day Lincoln himself made the speech."

Fair authorities estimate that it would take 12 early-morning-to-late-night days and the constitution of a bulldozer to see everything that will be offered. That does not include what New York itself is planning for the visitor. Broadway, naturally, is going all out, and there will be special shows and concerts at Lincoln Centre, special exhibits at the museum and libraries, and trials for the American Olympic team.

But the fair's the main show, of course. And what you'll see there is man at his proudest. One day recently, carried away by the sight growing before his eyes, Robert Moses lifted up his gravelly voice and carolled, "Come in your helicopter. Land on our Helicopter Tower. You will be more filled with wild surmise than stout Cortez and his men gazing at the Pacific, silent upon a peak in Darien."

Only Yesterday

OUR 14-year-old son came across a picture of Mae West in a magazine. "Isn't this funny?" he said. "Here's a woman who calls herself Mae West."

"What's so funny about it?" I asked.

"Well, that's the name of a life jacket!" he said. C. A

UNDER the "Antiques For Sale" section of the classified ads in a newspaper was listed a Shirley Temple doll. —B B.

Last Stand of the Lion



By Jack Denton Scott

For over an hour we sat in our car in South Africa's Kruger National Park, watching a scene that seemed to have come alive from a painting. Morning mist was rising from the damp grass in little gunsmoke puffs. A herd of graceful impala, with milk-white bellies and black stripes along their sides, cropped the grass in quick, nervous motions. Two giraffes, legs propped at an impossible angle, drank from a small pool caught in a dip of earth. Four zebras stood behind them, heads in the air, as still and as perfect as porcelain.

Suddenly my wife gasped and pointed. Coming out of the high grass to the left was a big lion, shuffling along head down as if he couldn't care less about the impala a few hundred yards from him.

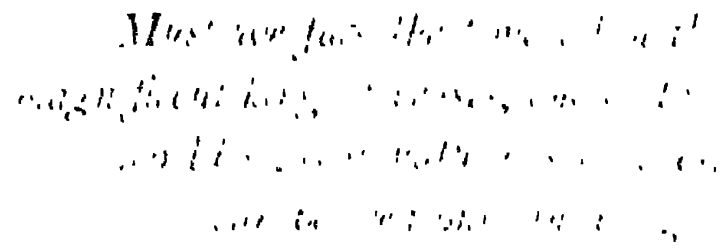
"We're about to see something spectacular," the South African with us said softly. "There is a lion with a plan!"

The plan seemed to be for the lion to sit like a big dog and stare. He sat for 15 minutes. At last, from beyond the nervous herd, came the sound of a lioness coughing. The lion's ears twitched. Then, in an amazing burst of speed (most experts agree that a lion can run 100 yards in four seconds flat), he started towards the impala. Panicking, they fled in bounding leaps directly away from the lion, passing between two grassy rises into a little valley.

We drove after the great cat, which had now slowed to a walk. There, in the middle of the valley, lay two dead impala. Beside them, three creamy-tan lionesses awaited the lion before beginning their meal.

This was my dramatic introduction to Africa's largest carnivore

Condensed from Frontiers



in action. Using co-operation and strategy, the lion we watched had actually herded the impala into the death trap when one of the lionesses coughed to signal that they were in position. Planning and execution were perfect.

A King at Bay. The world's most famous animal, the huge, tawny, amber-eyed cat needs little description. Since the beginning of recorded time he has appeared in art, religion and fable. His name is a synonym for strength, nobility and courage. He is mentioned in nearly every book in the Bible. His domain was once large—all of India, Africa, Persia, Syria, Palestine, Greece, the Balkans, and the British Isles. Now he is fighting for existence in his last stronghold, Africa.

It is man who has been the lion's greatest enemy. Egyptian, Assyrian and Persian monarchs sought renown as lion killers under the guise of protecting the peasants. The Romans captured over 50,000 lions and brought them to Rome within a period of 40 years. A Mogul emperor of seventeenth-century India hunted lions with an army of 100,000 men. The Turks paid a bounty for each lion destroyed by Arab tribes.

Thus, by the end of the last century, lions were extinct nearly everywhere, except in certain parts of Africa, and even there they were hunted unmercifully. In South Africa, with the spread of farms and civilization, they were shot, trapped and poisoned until by the middle of the nineteenth century the most handsome subspecies of all, the black-maned Cape lion, was exterminated.

After publication of President Theodore Roosevelt's account of an African safari in 1909, his hunt organizers booked 300 parties. The

number of lions killed was appalling: several white hunters claimed over 200; one party killed 60 or more lions on the Serengeti Plain; hunters took 1,000 in less than 12 years just in Somaliland.

No one is certain what the lion population is today, but currently the king is making his last stand, momentarily protected, in national parks in South Africa, the Congo, Uganda, Kenya, Tanganyika and a few game reserves where he can be hunted only with special expensive licences. It is impossible to predict what will happen under future governments.

Given a fair chance, the lion can take care of himself. His charge is one of nature's most awe-inspiring sights. When he decides to rush, he drops his head, his tail twitches, then stands stiffly erect; he utters a series of rumbling growls, his yellow eyes flame, and he charges. The impact is shattering. An Englishman, George Grey, tried to run a wounded lion down on horseback. The lion suddenly doubled back and, although shot twice, easily bowled over Grey's horse and killed the hunter.

Sir Alfred Pease, author of *The Book of the Lion*, describes a lion charging three men after it had been wounded four times by their high-powered rifles.

Hide and Seek. The cat also has great talent for concealment. Black shading on his ears breaks up the head outline, the coat resembles grass. Lions take advantage of the smallest cover, flatten so closely to the earth that they seem part of it. One hunter searched for an hour for a wounded lioness who had virtually wrapped herself round an anthill on the open plain, blending with the background so perfectly that she appeared to have vanished.

It is the exceptional lion that weighs more than 500 pounds. Most run between 400 and 500, and are nine and a half feet or less in length, including the three-foot tail.

Unlike most cats, they are unafraid of water and become skilful swimmers. Also, despite contrary opinions, lions can climb trees. They are amazingly agile. One hunter measured a lion's leap at almost 40 feet, and lion expert F. Vaughan Kirby saw a lioness jump without effort to the top of a 12-foot embankment.

But the lion's main weapon is strength. A lion can kill an ox more than twice his size, breaking the neck with a quick combination of fang and claw.

Biologist Emile Gromier once watched two lions dragging a horse uphill through heavy brush. "It was a feat of strength," he said, "that would have taken 20 men to duplicate."

The Killer. Some of the lion's hunting feats are astounding. He will attack a full-grown hippopotamus, that tank of flesh which few animals have the courage or strength to molest. In Uganda, lions

have been observed killing the fearful crocodile, and in the Kruger National Park, one was seen outmanoeuvring and tearing in half a giant python.

Their killing skill is almost surgical. I saw a lion appear amid a herd of wildebeest, quickly separate one animal, run easily beside it, then flip up a paw and slap its neck. The cat ran a few paces ahead waiting for its victim to fall. The wildebeest tumbled, neck broken, precisely where the lion waited.

This is not the usual technique; experienced hunters claim that lions kill horned game by pulling the head to the chest so that when the animal falls it breaks its neck. Hornless beasts are usually downed by a bite close to the ears that often penetrates the brain.

Battle for Survival. Unlike most cats, lions are not wanton killers; they slay only to survive. Lieutenant-Colonel James Stevenson-Hamilton, who studied them for many years in the Kruger National Park, claimed that a pride of six lions kills on the average two big antelope a week, that a single lion takes only ten to 12 animals a year. They do not harm domestic animals if wild game is available. Exceptions are the old and incompetent. One writer tells of an old lioness that specialized in goats and chickens. When she was killed, they found she was without teeth.

There have been man-eaters, also created through old age or lack of food. The most publicized were two maneless lions at Tsavo, Kenya, who stopped the construction of the Uganda Railway for weeks, killing 28 Indian coolies and scores of Africans before the animals could be destroyed. Another, in Mikindani, Tanganyika, killed 380 people.

The lion spends years learning the arts of survival. After a two-week courtship (with a polygamous playboy who may desert her after the children are born) and a 108-day gestation period, the lioness is likely to leave her pride of six to 20 lions and seek a secluded place near water. There she brings three or four fluffy, striped and spotted 12-inch cubs into the world, each weighing less than a pound. Leaving them only to seek food (at which time hyenas may sneak in, often carrying off an entire litter), the lioness nurses them for three months and also begins bringing pieces of meat or disgorging her own partially digested meal.

Lions have a number of sounds used for communication: coughs, grunts, roars and moans. The female often controls her offspring with a moan that sounds as if it were strummed from a bass viol. One early morning when my wife and I were sitting in a car watching the animals in the Nairobi Royal National Park, we saw two spotted lion cubs looking as if they had just stepped out of a toy shop. Curious, they came within 20 feet of us; then there was a stirring in the brush by

the roadside and their mother poked out her tan, gold-eyed head and moaned. At the sound the cubs fled to her side, and the family vanished in the undergrowth.

At five or six months the cubs are taken to a kill where they attempt to imitate their mother as she eats. An army officer once saw a lioness at an oryx carcass carefully instructing the cubs in the use of claws to strip the skin off the meat.

The Lesson. At about three months the cubs are weaned, but as their canine teeth do not develop until they are a year old they remain completely dependent upon their mother. Now serious training begins.

Safari organizer Donald Ker once watched a lioness stroll along the downwind side of a herd of gazelles drinking near a reedy swamp. Suddenly, she streaked into the herd, scattering the panic-stricken animals into the swamp. At this, lions, lionesses and half-grown cubs (an entire pride) poked their heads above the high grass where they had been hiding, and rushed after the trapped animals.

Ker saw eight gazelles killed in less than a minute, with cubs inexpertly assisting. This lesson involved several techniques: hunting at the right place (near water-holes), pride co-operation, using the wind properly, killing method. Above all, it involved patience—the hunting cat's greatest asset.

The lioness is a better hunter than the male, fiercer and more lithe. She is the scout and executioner of game, with the lordly maned sultan lending his superior weight and power only if needed. Even when the lioness is hunting to feed herself and cubs, the male is likely to take his share first.

The young stay with the mother (who may mate again meanwhile) until they are two, when their stalking and killing techniques are well developed. Their manes grow at three; they mature at five, surviving in the wild for about 15 years, and up to twice as long in captivity, where they seem to thrive.

It will be a sad day when lions are seen only in cages. As Alan Moorehead noted in *No Room in the Ark*: "The hunting lion is one of the last great natural spectacles left in the world, and has a fascination which is beyond value."

Experts such as Colonel Mervyn Cowie, director of the Royal National Parks of Kenya, thinks we won't have this spectacle much longer unless something is done soon. The lion can survive only where the wild grazing herds are kept intact. With the new Africa emerging, hungry for meat, hungry for land, it appears that the King of Beasts' days are numbered. The national parks remain his last stronghold.

How long this magnificent animal, living symbol of courage and nobility, can last is a question only the African nations can answer.

What Became of Charles Lindbergh?

the public eye in a fog of war and controversy; he chose privacy rather than fame, silence rather than contention. This is why



By Walter Ross

In his high, slate-roofed Tudor-style house on a knoll in Darien, Connecticut, the tall, handsome 61-year-old man woke early one morning not long ago. Looking out of the bedroom window, he noted the wind direction and force by the movement of the waves in a near-by cove, and he scanned the clouds for the high-altitude winds and probable weather. He dressed in a plain white shirt, a plain dark tie and a plain grey suit, and went down to a substantial breakfast with his wife and 18-year-old daughter, Reeve, the youngest of his five living children (three sons, two daughters).

After breakfast, he went upstairs, took a clean sock and into it dropped his razor, toothbrush,

Condensed from Esquire

toothpaste and comb. He knotted the sock and put it in his pocket. He picked up an overnight bag, his only luggage for long trips, said good-bye to his wife and daughter, scattered some bird seed on the lawn, got into his car and drove to Darien station and mingled with the other commuters on the platform. A few years ago he wouldn't have got out of his car until train time, for fear he would be recognized and annoyed. Now he knows that most people do not recognize him, and those who do, in Darien, do not bother him. Boarding the train, he sat alone and read letters. On arrival in New York City, he walked to the new Pan American building, took a lift to the office of Juan Trippe, president of Pan American World Airways, to which he has been a consultant since 1928.

Later, he took a taxi to the East Side Air Terminal, where he caught a bus to Idlewild Airport. There he boarded a Boeing 707 jet, a plane he had helped to adapt for Pan Am's use. He was on his way to Paris—by the great-circle route over the Atlantic that he, Charles Augustus Lindbergh, "Lucky Lindy," "The Lone Eagle," had been the first to fly alone in 1927.

In Paris, he had a conference with Sud Aviation and British Aircraft Corporation Ltd., the manufacturers who are jointly going to produce the Concorde supersonic jet airliner. Lindbergh and the Pan Am engineers had recommended their airline to order six of these aircraft, for delivery in 1968. Now they would have to work out details of construction with the manufacturers. When a prototype is ready, Lindbergh will undoubtedly assist in the engineering flight tests, as he did with many of the other aircraft which he has helped to develop for his airline.

Next, Lindbergh visited a couple of airports not far from Le Bourget, where 36 years ago he was nearly smothered with adoration by an uncontrollable mob. Now nobody recognized him.

The following day, he flew to Washington for a U.S. Air Force committee meeting. During most of his life, in and out of uniform, Lindbergh has been a technical adviser to the Air Force. Since 1954, when he was commissioned a brigadier-general of the Reserve, he has served on several key committees. One made the decision approving the Atlas missile, the motive power for the Mercury astronaut orbital flights.

Finishing his duties in Washington, he flew to New York and reported on his Paris meeting to Trippe. Then he took the train to Darien. The next day he drove to New Haven, to the Yale University Library, where for a few hours he read and made notes for a book he is writing on the history of flight.

From New Haven, Lindbergh drove to Danbury Airport, hired a small private plane and flew round

near the airport, just to keep his hand in. While he has flown the fastest military jets, he prefers a small, slow plane, if possible one with an open cockpit. He is still a very good pilot.

From Danbury he drove back to Darien. That evening there would be time to get off some letters if the friends who were coming to dinner left early enough. As usual, Lindbergh was a couple of months behind with his personal correspondence, all of which he answers laboriously in longhand. He is the slowest writer known to man, he says—and he is a perfectionist. It took him 14 years and ten rewrites before he would publish *The Spirit of St. Louis*, but then it was good enough to win a Pulitzer Prize.

To his old friends, Lindbergh is "Slim"; to his business associates, newer friends and his wife, he is "Charles"; and to recent acquaintances, "General." To the public, outside the pale he has drawn sharply around his life, he is merely the ghost of "The Lone Eagle." They no longer know him when they see him, although his appearance hasn't changed much since the days when he was the most photographed man in the world.

The mid-1927 newsreel shots show him smiling and heeding the photographers' requests to pose. But not long afterwards, with welcome after welcome disrupting his life, he stopped smiling and later stopped posing. When crowds consistently mobbed his plane wherever he landed, he began to fear he would kill someone with his propeller, so he stopped announcing his arrivals. Then—directly as a result of mass curiosity about every facet of his life, he felt—cranks and psychotics began threatening his family. His firstborn son, Charles, was kidnapped and murdered. When threats against the life of Jon, his second son, began streaming in, Lindbergh fled the country with his family in 1935.

Lindbergh's popularity was not enhanced by his trip to Germany in 1936; he was vilified for accepting a Nazi medal in 1938; he was widely disliked for his role in America First, the isolationist organization he passionately supported in 1941. He has, however, been content to let his words stand on their own record.

The reward for his silence has been criticism. This he has accepted as part of the price of privacy. And he has asked his friends and colleagues not to speak for him or about him. Their purposes are not quite so inflexible as his, however, and occasionally the temptation to speak out is too much to bear.

For example, consider the incident of the Nazi medal—the Service Cross of the German Eagle—which, more than anything else, has blurred Lindbergh's image. Lindbergh's friend, Colonel Truman Smith, USAF (Ret.), has written

the story of the medal in order to clear the record. It is part of an unpublished manuscript that Smith has deposited in the Yale University Library.

Smith, U.S. military attaché in Berlin during the Hitler regime, invited Lindbergh to come to Germany to do a high-level intelligence job for America on the German air force. It was Smith's idea to use Lindbergh's prestige as a key to Field-Marshal Goering's vanity. The ploy worked. Lindbergh was shown planes, factories and airfields that no foreigner had seen; he reported each night to Smith what he had been shown.

As part of the assignment, Lindbergh was requested to attend a dinner given by U.S. Ambassador Hugh Wilson for certain Nazi officials, including Goering. The purpose of the dinner was to try to ease the financial strain on Jews being forced to emigrate from Germany.

The German air ministry had phoned the American Embassy the day before the dinner to say that Goering was planning to decorate Lindbergh, but the secretary who took the message failed to pass it on. As Smith tells it, Goering arrived at the dinner late, carrying a little red box. He made a speech in German, which Lindbergh did not understand, and capped it by opening the box and hanging the medal on a ribbon around Lindbergh's neck.

Considering the occasion and its purpose, Smith says, Lindbergh could not have refused the medal without damaging delicate State Department negotiations. Wilson confirmed this in a letter to Lindbergh after the event.

Lindbergh could have revealed the truth at the time, and could possibly have escaped the violent attacks. But, as a friend says, Lindbergh cannot bring himself to curry public favour.

In 1941, President Roosevelt, furious at Lindbergh's America First activities, further diminished the Lindbergh legend by making a number of unflattering public references to him. Three days later, Lindbergh wrote to Roosevelt that there was "no honourable alternative to tendering my resignation" from the Army Air Corps Reserve.

When war was declared, Lindbergh tried to volunteer his services. It was hinted to him that he would be acceptable if he recanted his America First statements. He refused, and was refused. However, although a civilian and well over combat age, he managed to get into the air war by getting himself appointed a technical representative of United Aircraft Corporation, which was building the Corsair single-engine fighter plane for the U.S. Navy and Marine Corps.

On one occasion, in California, he tested his reflexes by taking a plane up against two of the Marines' best fighter pilots. In a high-altitude gunnery contest he "outguessed, outflew and outshot" them both.

Then, with official permission, he went to the South Pacific to continue technical work on the Corsair. He took one book with him: the New Testament.

There he would turn up at a Marine base. Planes would be fuelled and armed and ready to fly when one pilot would report sick. At the last minute, Lindbergh, in civilian clothes, would climb into the empty aircraft and fly the mission.

After a few such flights, Lindbergh thought that the Corsair could carry twice its bomb-load of 2,000 pounds. So he built a special bomb rack, installed it, demonstrated that the Corsair would fly with a 4,000-pound bomb-load, probably the heaviest weight of bombs carried up to then by a single-engine fighter. It was an important technical contribution to war aviation.

The U.S. Navy had kept Lindbergh's presence secret from the Japanese. Nevertheless, the Navy was worried about his flying in combat. If, while in civilian status, he were shot down, he could be executed as a spy. So that responsibility for his being in combat wouldn't fall on anyone, the Navy asked him to move on.

Lindbergh left, but did not go home. Interested in the performance of twin-engine fighters, he persuaded a Marine pilot to drop him off at an Army base in New Guinea. A squadron of twin-engine Lockheed P-38's was stationed there. General MacArthur legalized Lindbergh's stay, but warned him to keep out of combat.

Now Lindbergh began flying "safe" missions: i.e., where no Japanese interceptors were expected. When he returned from these long overwater flights, mechanics found his fuel tanks much fuller than those of other planes in the squadron. Asked about this, Lindbergh said that in flight he throttled back to 1,600 r.p.m.'s and increased propeller bite, thus conserving fuel while maintaining airspeed. The other pilots thought that this would ruin his engines, but when his engines showed no more wear than others, the squadron adopted Lindbergh's procedure. Immediately, the range of the P-38 was increased by nearly 500 miles

This enabled the fighters to fly long escort missions with bombers, and Lindbergh flew with them. On one such mission, he shot down his first Jap. It was a Sonia-type fighter that attacked Lindbergh's plane head-on, first firing, then apparently trying for a crash. The planes almost met nose to nose, firing all the time, with Lindbergh just clearing the Sonia's wings as it smoked into the sea. He reported the kill in his usual laconic style; other pilots supplied the dramatic details.

Altogether, Lindbergh flew 50 combat missions as a civilian. He managed to make the same combat tour of duty he would have made

in uniform. He has never gone into the full details of his war experiences.

LINDBERGH's horizons have expanded with his experience. "To me in youth," he said, "science was more important than either man or God. The one I took for granted; the other was too intangible for me to understand." He believed that it was superior plane, guns and training that saved him the time he nearly was shot down in the South Pacific; that "without a highly developed science, modern man lacks the power to survive."

After a dangerous high-altitude flight he wrote: "This flight taught me that in worshipping science man gains power, but loses the quality of life."

He went to Germany after the war to see what Allied bombing had done to the Germans, who had been leaders in science. "In Germany, I learned that if his civilization is to continue, modern man must direct the material power of his science by the spiritual truths of his God."

He has always been a lone wolf, a doer, an adviser; not an organization man. After his historic flight to Paris in 1927, he became the most beloved man in the world. He was a composite hero, a myth dreamed up by the multitude with a compulsion to worship someone who could fly higher than themselves. They thrust fame on him, and he thrust it back Lindbergh never hankered after fame. "The limelight shines in your eyes," he once said. "It blinds you; other people can see you, but you can't see them."

The same qualities of individualism, perseverance, stoicism and self-reliance that carried Lindbergh to glory and adoration have sustained him, silent in obscurity, against the appraisal of the ignorant. He has gone on making his contribution in spite of fog, sleet, bullets and a sharp shift in public opinion.

It is a measure of the man that he traded fame for privacy in order to fulfil his life. It is a comment on society that he had to.

Wait and See

AFTER a few days' experience with his first pair of bifocals, my brother said, "They'll be fine, I'm sure, as soon as I get used to the feeling that I'm wading in water halfway up my eyeballs." —R E T.

A SECRETARY had a blind date one night. She usually wears glasses, but decided to meet the man without wearing them. If she liked him, she would do without her glasses altogether for the evening. If not, she would trot back upstairs and put them on. The hour arrived, she met her date and was not impressed, so she went back for her glasses. On her return she was quite shocked to find that he, too, had put on glasses. —B. K.

ANTI-VIRAL DRUG AGAINST SMALLPOX

THE FIRST drug shown to protect man against a lethal virus disease is an orally administered, synthetic compound. Developed in Britain, it may be better than vaccination in controlling smallpox epidemics. A report in *The Lancet* states that the drug—known as BW-33-T-57—may be the most significant advance against smallpox since the discovery of vaccination in 1796.

During an outbreak in Madras last year, 1,100 people who had been in intimate contact with smallpox patients were given the new drug. Only three mild cases of the disease occurred among them. Of a similar number of contacts who did *not* receive the drug, most of them vaccinated, 78 went down with smallpox, 12 died.

So far, BW-33-T-57 has not been tested in the *treatment* of smallpox. But, used as a protective agent, it should bring great relief to countries where, despite extensive use of vaccination, epidemics are frequent. It may also be the most effective means of preventing the spread of smallpox in countries into which cases are "imported" by air travellers.

—Press Association

PNEUMATIC BANDAGE-SPLINT

A DOUBLE WALLED, transparent, plastic tube, with a slide fastener and a simple screw-type valve set in the outer wall for inflation, makes an excellent pneumatic dressing splint for first aid in limb injuries. It causes less discomfort than conventional bandaging, and is simple to apply. Removed from its sterile envelope, it is opened flat and wrapped round the injured member. The fastener is then closed and the splint inflated. The pressure of the air immobilizes the limb and arrests bleeding. The injured person can be transported to proper medical facilities without the risks associated with conventional splints or tourniquets. The clear plastic permits a good view of the wound and facilitates decisions about treatment. X-ray studies are feasible without removing the splint.

—Adapted from a report by A. P. Kelly, M.D., and J. I. Fox, M.D., in *Archives of Environmental Health*

NO NEED TO WARM THE BABY'S BOTTLE

FOR generations mothers and frequently fathers have warmed the bottles before feeding their babies. But babies do just as well on cold bottles right out of the refrigerator, according to a study at the premature-baby unit of Bellevue Hospital, New York. The study director suggests that since it takes an estimated 150 to 200 hours a year to warm bottles for each baby, considerable mother-power and some father-power are being wasted in this activity.

The new study was conducted at the premature-baby unit in the belief that if delicate, premature infants could thrive on cold feeds, unwarmed feeds

should be acceptable to normal infants. For two years, 20 observers from the nursing division of the U.S. Public Health Service studied in detail the feeding behaviour (including interest in food) of a group of babies in the Bellevue unit for a total of 458 patient-days. They watched the sleep, crying and kicking patterns of infants on both warm and cold feeds all round the clock; measured intake of food or fluid, weight gain and regurgitation. They found no significant difference between the cold-fed and warm-fed babies, and concluded that the traditional warming of the feeds is in no way advantageous to the infant. All babies at Bellevue, both premature and normal, are now having cold feeds and thriving on them. —*N.Y.T.*

WORLD'S FAIR MEDICAL STRATEGY

A GROUP of ex-military men, headed by Dr. Sheldon Brownton, are preparing an assault on possible health hazards and medical problems of the New York World's Fair 1964–1965. From studies of past fairs, particularly the Seattle and Brussels expositions, Dr. Brownton has developed his plan for emergency medical care for visitors to the New York Fair, where attendance is expected to total 70 to 80 million.

Anticipated medical problems, in addition to minor cuts, bruises, abrasions, headaches and foreign objects in the eyes, include heat prostration, heart attacks and cerebral haemorrhages. Dr. Brownton is preparing for fractures, diabetic comas, insulin or other types of shock, food poisoning and infectious diseases.

Provisions are made for maternity cases. A 30-bed emergency hospital, fully equipped, will serve as a centre for medical services. One of the more unusual medical precautions being considered is a "blister bar," consisting of a handrail and a kneeling bench to make blistered feet readily accessible to attending nurses. —*JAMA*

ICE-CUBE MASSAGE

MASSAGES with ice cubes appear to be helpful in treating some cases of arthritis, bursitis, low-back pain and sprains, says Lieutenant-Colonel Arthur Grant, of Brooke General Hospital, Texas. Applied directly to the skin until a numbing sensation sets in, the ice massage has a pain-killing effect, enabling the patient to exercise more freely. Colonel Grant explains that exercise is the most useful part of the treatment, since motion should be restored to painful muscle areas as soon as possible. —*Today's Health*

HUSBANDS, AS DOCTORS SEE THEM

"IF A WOMAN patient repeatedly tells you that 'my husband is wonderful, doctor'—especially when you haven't even asked her about her family life—you can bet you're dealing with a neurotic," said Dr. Leonard Lovshin, of the Cleveland Clinic, recently.

Dr. Lovshin reached that conclusion, he said, "because I'm a husband, and most of my friends and associates are husbands, and I don't know of a wonderful one in the lot. If your patient will admit to herself that she's married to a typically inconsiderate oaf, the chances are that she's normal." —*JAMA*



Prime Minister Sean Lemass makes the Irish Republic a home for men

Why Irish Eyes Are Smiling

There's a new look on the land and things are booming in the towns. For the first time since the turn of the century, Ireland's economic future looks bright

THE SUMMER sky breaks over the land in splinters of green, gold or luminous waves of grey, staining the hills blue and purple and vermilion, heaping the valleys with shimmering veils of mist. In that weird, wet Atlantic light—or so they say—the swarthy chieftains and pale queens who once ruled the five kingdoms of Celtic Ireland still clatter across country.

As the island's endless sleight-of-sky creates and dissolves horizons, the landscape seems dreamily unreal. The reality of Ireland is special: it lies on a border region where tragedy and laughter, hell and the happy isles converge.

Ireland's traditional Gaelic storytellers still spin their grave tales in the western counties, and of late have also favoured Radio Eireann with their art. Tinkers' carts still creak along country roads; city air is as pure as Connemara spring water. Off the Aran Islands, fishermen still go out in currachs, their ancient coracles, and never learn to swim because they know death takes longer if they do. Ireland has in abundance the qualities that often seem to be disappearing elsewhere: kindliness, an unruly individualism,

Condensed from Time

lack of snobbery, ease, style and, above all, sly humour. Though the Irish have lived much of their lives with bloodshed and privation, their tales of the bad times are recounted with as little rancour as if they were retelling the saga of Lugh of the Long Arm and the time he slew Balor of the Evil Eye with his sling-shot.

But while the Irish cling to their past, the Republic is also at last facing up to its future—and for the first time in this century, most Irishmen are ready to believe that it can be a bright one. The signs are everywhere: in the new factories and office buildings, the Irish-assembled cars (Austins, Fords, Volkswagens) fighting for street space in Dublin, the new television aerials crowding the rooftops. The signs are provided by the new hotels and carriage-trade castles, the well-dressed people shopping in supermarkets—and the waning of national self-pity.

The nation's new mood is that of Sean Lemass, the quiet, pragmatic man who five years ago succeeded Eamon De Valera as *Taoiseach*—Prime Minister. In De Valera's shadow, he has laboured single-mindedly for years to break the vicious circle of declining living standards and dwindling population that threatened Ireland's very survival as a nation. His bold programme of industrialization has already created new jobs and wealth in an economy whose primary product, beef for Britain, has been the same for as long as there have been potatoes to go with it. Now, as new opportunity lowers the perilously high emigration rate, the Government is beginning to rebut the bitter quip that Ireland is "less a home for men than a breeding ground for emigrants and bullocks."

Vanishing Man. This island in the Atlantic has cast its shadow across the civilized world since the Dark Ages, when Irish priests and scholars roamed Europe expounding new (and mostly heretical) theologies. In a diaspora even greater than the expulsion of the Jews, more than 3·5 million Irishmen in the past 100 years have scattered across the world. Their talent for politics, for faith, above all for words, gave more brilliant politicians, distinguished churchmen and magical writers to the rest of the world than to Ireland.

Though there was hardly a country or a field of endeavour where Irishmen failed to make a mark or a mint, at home they seemed a vanishing race. In 1845, before the potato famine decimated its population, Ireland was one of the most densely settled countries in Western Europe; since then, Southern Ireland's 6·529 million inhabitants have dwindled to 2 824 million. It is the only nation in Europe whose population has shrunk in that time. For while Irishmen entered the country in a trickle, they left it in waves. The exodus from Ireland continued when the country won its

independence from Britain in 1921 —after seven and a half centuries of English rule, ages of religious persecution and economic exploitation, countless risings and reprisals.

"Ourselves Alone." As in most other newly-liberated countries, the men who took over were romantic revolutionary heroes, ill prepared by experience to meet the practical challenges of building a modern nation.

In many refreshing ways, the land has remained true to its leaders' vision of a pastoral "Holy Ireland." The suicide rate is Europe's lowest. Crimes of any kind are few and getting fewer—the Republic's commonest transgression is larceny of bicycles.

In economic terms, Ireland's insular ideal proved disastrous. True to the aims of the Sinn Fein (Ourselves Alone) movement, the Government in the 1930's discouraged foreign investment in Ireland, raised some of the world's highest tariff barriers to exclude foreign goods and protect new, highly inefficient domestic industry. The result of its belt-tightening was a rising tide of emigrants—by 1956, well over 600,000 — while among those who stayed on there was a paralysing sense of frustration and fatal ism.

As the man who has done most to end his country's long sleep, Sean Lemass got his chance when he took over as *Taoiseach* in 1959. After 19 years as Minister for Industry and Commerce, he was passionately convinced that the Republic's timorous protectionism could only lead to national extinction. Though as a boy in his teens he had been a tough guerrilla fighter with the I.R.A., he was the antithesis of all the old fire-breathing heroes, and talked trade and tariffs to the voters in intense rapid-fire sentences that many found hard to follow "That Lemass!" snorted one dubious Dublin politician. "He couldn't lead Ireland over O'Connell Bridge." But what Sean Lemass wanted most was to lure foreign investors over O'Connell Bridge.

Late Industrial Revolution. The Republic's new Prime Minister sent blarney-blessed salesmen all over the world persuading foreign industries to set up plants in Ireland. They offered one of the few labour surpluses in Europe, liberal grants for equipment and construction, and

The 65-acre site of Unidare Ltd's electrical engineering works at Finglas, Dublin, typifies Ireland's expanding industrial programme



additional cash to companies that would build plants and train workers in Ireland's pinched north-west and south-west.

Many Irishmen were profanely sceptical, but the programme so far has proved a gallivanting success. Since 1955, 160 new Irish and foreign-backed plants have been built and 50 more are nearing completion. The factories have created 21,000 new jobs and are turning out goods ranging from transistor radios (Japanese) and pianos (Dutch) to heavy cranes for a German company and oil heaters for a French firm. Industrial production rose by 28 per cent between 1958 and 1961; and this success is staunching the population outflow. From an average of 40,000 a year, the number of emigrants has steadily dropped to 20,000 last year. Many emigrants are now returning to take jobs back home.

Heat With Peat. In his desperate striving to mobilize new industry, Lemass did not hesitate to use public funds wherever private capital was not forthcoming for key projects. He took over a one-horse power company and built it into a nation-wide network that has electrified 97·6 per cent of Ireland's rural districts. The country had no oil and little coal, but Lemass found a source of industrial fuel in its peat bogs, where huge machines now cut turf that a busy, state-owned processing plant turns into inexpensive slow-burning briquettes. He got Ireland's state-owned airline off the ground, and has happily watched Aer Lingus's shamrock-painted planes become one of the few government airlines to show a consistent profit on the Atlantic run.

The very word socialism alarms Fianna Fail supporters (the majority party, in office almost continually since 1932). Yet one-third of all industrial enterprises in Ireland today are financed by the Government, which has gone further towards nationalization than even Britain's Labour Party advocates.

Total Effort. Lemass's most bruising disappointment in office was President de Gaulle's rejection of British membership in the Common Market last year. Determined to take the Republic into Europe alongside Britain, Lemass had already started whittling his nation's tariff barriers. To clear the way for this entry, which he expects will come before 1970, Lemass has unequivocally committed his nation, which has 13,000 men under arms, to support NATO policies.

One of the most compelling motives for seeing Britain and the Republic of Ireland inside the European Community is the prospect that the Republic would thereby take a step closer to reunification with Northern Ireland. Automatic dismantling of their mutual tariff barriers under Common Market rules, says Lemass, would necessitate a degree of co-operation between Protestant and Catholic

Ireland. Lemass foresees "a total national effort in which old differences and animosities can be forgotten."

Changing Ways. The Irish Government's eagerness to raise Ireland's "Green Curtain," as Lemass calls it, reflects a growing cosmopolitanism. The ultra-conservative Roman Catholic clergy still heavily censors the arts and entertainment. At one time or another, many of the best native authors have been banned from libraries. But things are easing up a little. Film censors have been told to go carefully with the scissors "or our cinemas won't get any films at all." Television, which now lights up more than 200,000 screens, is a perennial assault on Gaelic puritanism. The Republic's own station competes with programmes from Britain that to Irish viewers seem *risqué*.

The Irish have written some of the tenderest love lyrics in literature, but the acid axiom among Irish girls runs: "Put an Irishman in a room with a girl and two bottles of stout, and he'll pick the stout any time." Sixty-six per cent of all males between 20 and 39 are bachelors. Many explanations have been offered for this seeming misogyny: the epic suspicion that war and the gods are more important than mere love; the oddly puritanical streak in Irish Catholicism; above all, the heritage of hardship that gives the Irish a terror of insecurity and encourages them to stay celibate.

Now there is at least some change. The average marriage age has dropped from 33 for men in 1946 to just over 30; from 28 for women to just under 27. For the young, one of the most joyous recent innovations has been a proliferation of dance halls and a burgeoning of "show bands"—200 in all.

Radiant Goals. The Republic faces many urgent problems. It is still critically short of modern housing; hundreds of once-elegant Georgian mansions in Dublin have for years held squalid slums. While the Government has succeeded in easing Ireland's historically harsh system of farm leasing, nearly one million of the country's 11 million acres of agricultural land are still covered by 11-month leases, which discourage tenants and owners alike from improving the land. Though 45 acres of good land are the accepted minimum for a viable farm, there are still 208,000 farms or holdings (out of 360,000) with less than 30 acres each.

What is radiantly different about Ireland today is the serious expectation that its ills and lags will in fact be corrected. Lemass has recently released details of a seven-year economic programme that aims to boost the Gross National Product 50 per cent by 1970. If it succeeds—and his goals in the past have been set far short of actual performance—the Republic will have travelled a long way from "the unfortunate country" of Ireland's ancient lament.

A story based on the compassionate role of the Royal Navy in the Spanish Civil War which ended 25 years ago

CARGO OF INNOCENCE

By Laurence Kirk

H.M. Destroyer *Tremendous* was idling on patrol off the north coast of Spain in the summer of 1937 when a wireless message was brought to the Captain:

STAND BY TO ESCORT FRENCH TRAWLER ARGONNE WITH CARGO SPANISH REFUGEES.

Forty-eight hours later came another:

FRENCH TRAWLER DELAYED. PREPARE TO RECEIVE 42 REFUGEES AT 0430.

Long before dawn *Tremendous* was at the appointed place with all her guns ready for action in the event of an attempt at interference. Presently two fishing boats came creeping silently out of the mist and in a few moments were alongside. A messenger ran up to the bridge.

"First Lieutenant's compliments, sir. Copy of the list of refugees."

The Captain's eyes opened wide as he began to read:

1. José Ramón Esquerra. Aged seven months. Orphan.

2. Maria Dolores Carrión. Aged 14 months. Orphan.

3. Manolo Juan Uscavilla. Aged 11 months. Orphan.

The Captain looked up and saw baby after baby being handed on board, checked by the Gunner (T), and delivered with the utmost solemnity into the arms of one of the able seamen who were drawn up in line. The young First Lieutenant cast an agonized glance up at the bridge from time to time, as though he were expecting some thunderbolt to fall. But the Captain was speechless. Twenty-two babies he counted, and after that a sorry procession of ten women, and all except three had babies in their arms, too.

If a swarm of locusts had descended on his ship and started to eat the

Condensed from Ken

brasswork the Captain couldn't have been more bewildered. As he watched, one of the elder children broke away from his temporary nurse, tripped on the deck and instantly set up a full-throated Latin yowl. This was the signal for most of the other children to begin. From end to end the ship became one lusty lament.

Summoning the Coxswain, the Captain enquired:

"What's going on, Huggins? Who's to look after these children?"

"Looks to me as though we was, sir."

"H'm. You've checked the list? Are they all present and correct?"

"Well, yes and no, sir."

"How do you mean—'yes and no'?"

"Well, sir, three of the children ain't exactly born yet, sir."

"But my God, Huggins, we can't have children born in this ship!"

"No, sir; but if that dratted French trawler don't arrive soon, sir, it's my opinion you will 'ave, sir."

The Captain passed a hand dizzily over his forehead. Huggins still stood at attention. "Was there anything else, sir?"

"No, no," the Captain said wearily, "that will be enough."

All that morning the ether vibrated with agonized messages from *Tremendous:*

HAVE EMBARKED TEN WOMEN AND 29 BABIES. REQUEST DISPOSAL.

The flagship, at a safe, comfortable distance, gave the unfeeling answer:

AWAIT FRENCH TRAWLER AND FEED THEM PRESUME YOU HAVE ADEQUATE STORES CONDENSED MILK. RUM RATION NOT RECOMMENDED.

Tremendous answered with a more urgent appeal:

REFUGEES INCLUDE THREE WOMEN LIABLE GIVE BIRTH ANY MOMENT. PLEASE ADVISE.

To this the reply was a little more helpful:

ADEQUATE NURSING STAFF IN FRENCH TRAWLER. SHOULD ARRIVE WITHIN 48 HOURS. POSTPONE DELIVERY IF POSSIBLE.

The Captain realized that no help was forthcoming from the flagship. The bridge seemed to be the only part of the ship not flooded with squalling infants. He was reluctant to leave this stronghold, but he forced himself to make an unofficial inspection. Various strange sights met his eyes: Able Seaman MacIlroy trying to salute with a baby tucked under each arm; a woman with no expression whatsoever, mechanically hunting for lice in the rags of the child at her breast; a girl aged three firmly clutching her brother, aged two, and trying to pretend that she wasn't frightened of this strange iron world; and lastly, Able Seaman Farrier doing his best to comfort a misery-soaked woman. "'Ere!" he was saying

rather loudly, "supposing I got you a nice cup of tea. That'll make you feel better in no time."

The woman just gazed at him uncomprehendingly, and the Captain stepped over a crawling infant and walked on.

All the women semed to have that same glazed, hopeless look, and the children's large brown eyes were far too big for their pinched faces. The Captain passed on, saying nothing, quite unbending; but when he went back to the bridge he burst out passionately to the signalman on watch:

"God, how I hate all people who start fighting!"

The signalman said, "Yes, sir," in the same tone in which he replied to everything else the Captain said.

The Captain sent for the Coxswain again.

"What about quarters for these women, Huggins?"

"They'll 'ave the mess-decks, sir. The men will sleep on deck."

"And the—er—the other three?"

"The officers 'ave turned out for them, sir."

"Good. And these children; they're filthy dirty, Huggins. They must be washed and looked after."

"Yes, sir."

"Tell the First Lieutenant I'd like him to detail some steady family men for the job."

"Aye, aye, sir."

Within a short time the First Lieutenant was inspecting the family men drawn up in line, while Huggins allotted two babies and a tin bathtub to each and gave instructions.

During the next 24 hours the children were subjected to a strange mixture of naval and nursery discipline. The great moment of the day was the bath muster at six o'clock when all the baths were placed in a row on deck. A whistle blew and



the family men marched up with a baby under each arm. Another whistle and the babies were undressed. Yet another whistle and the washing began. This was the signal for an outbreak of community yelling; but that was soon stilled, and the Captain, watching from the bridge, was satisfied to see that some of the children were actually laughing.

A play-pen was built amidships just abaft the torpedo tubes, and the family men kept their watches there instead of at their usual stations. The children's filthy rags were gradually discarded, and many of them fitted out in strange bits of old uniforms. The Captain noticed one round-eyed child in a curious garment which appeared to be made of the pyjamas which he himself intended to wear next week; but he said nothing.

There were other more serious matters to attend to. All that night there was a series of messages to the Captain from the shipwright who was placed in routine charge of the delivery room by virtue of being married to a midwife, and from the Captain to the flagship. The news from the latter was reassuring, and the news from below was still unalarming. As the blue-eyed First Lieutenant unfortunately expressed it: "All three women holding their own, sir."

But at dawn a messenger appeared.

"First Lieutenant's compliments, sir. Perez given birth to a boy. Mother and child both doing well."

The Captain leaned against the standard compass in relief. But almost immediately there was a message from the wireless office:

FRENCH TRAWLER AGROUND. REGRET NO FURTHER ASSISTANCE POSSIBLE. IF VERY URGENT PROCEED BORDEAUX DISEMBARK PREGNANT WOMEN. OTHERWISE PROCEED DIRECT PORTLAND WITH ALL REFUGEES. GOOD LUCK.

The Captain had just ordered full speed for Bordeaux when yet another messenger appeared.

"First Lieutenant's compliments, sir. Cheverra given birth to a girl. Mother and child both doing well."

The ease and simplicity with which it happened was nearly the Captain's undoing. He was beginning to think that a lot of unnecessary fuss was made about this business of bearing children. It seemed to him that the Royal Navy handled this affair, like most others, much better. Besides, he had never been a man to leave any job half done, and he was now so overconfident that he imagined that his ship and his men were capable of dealing with any emergency. So, after a hurried consultation with the First Lieutenant, the orders were changed and *Tremendous* altered course for Portland.

For the first day everything went well. The sun was shining and the children had taken with delight to the play-pen and the bathing

parade. Even some of the adults were beginning to show some willingness to live. Then, early in the Dog Watches, the labour of the third woman began. This was a very different affair from the other two.

For 16 hours it went on. The whole ship's company knew that if only they had gone to Bordeaux it would have been all right. It was actually as if the ship's honour were involved; and the whole 125 officers and men, except when they were on watch, paced up and down the deck with hands behind their backs, like one agitated husband.

For a long time distressing messages came from the makeshift obstetrical ward. But at last, after a sleepless night, a messenger came rushing to the bridge.

"It's all right, sir, it's all right!" he cried. Then he remembered himself. "Beg pardon, sir. First Lieutenant's compliments, sir. Escarmota given birth to a boy. Mother and child both doing well."

The Captain had full control of himself again. He never flickered an eyelid.

The entry into Portland Harbour was a triumph. Half the Home Fleet was there, and the story had already gone round: bugles sounded and signals of congratulations were run up as *Tremendous* passed. The Captain was satisfied with his week's work; he had been given a job to do and he had done it without assistance and without loss, and as he passed the flagship, he had his whole ragged cargo of children standing at the salute in front of the ship's company.

Later, the Admiral—egged on by his wife, it is true—wrote quite seriously to the Admiralty, suggesting that the names Perez, Cheverra and Escarmota should be permanently included in *Tremendous's* Battle Honours.

This request the Lords Commissioners somewhat abruptly refused; in which decision some people still think They were quite wrong.

Fair Play

MY FATHER was bruised and knocked about in a car accident, but he refused to go to hospital. The insurance company, though, insisted he go in for an examination. With great distaste he turned up at the outpatient's department, reported grumpily and was ordered crisply by the nurse, "Go in there and strip to the waist."

This was too much for him. He looked her in the eye and roared, "I will if you will."

—B. M.



My Most Unforgettable Character

By Anne Bowes

That stout-hearted woman standing on the Miami docks and barking orders at tough longshoremen is, I always have to remind myself, my mother. Not so long ago she was known in the music world as a concert artist and educator. Known now along the Miami waterfront as "Tugboat Kate" Thornhill, or just "Kate," she is probably the only woman stevedore boss in the United States.

When not working on the dock, Mom—brown-haired and fair-skinned in her remarkably youthful 60's—is a soft-spoken, gracious, feminine lady who is quite at home playing a Chopin concerto or giving a tea party for her fellow artists or for local or foreign dignitaries. That's why seeing her operating as a dock boss, her ample figure and flowered-print work dress grandly topped by a ten-gallon Texas hat (over a red rose in her hair—her trademark), never ceases to astonish me.

And I'm always amazed at the results she gets. When Kate bellows, "Hey, let's get going! What do you think I'm paying you for?" her steel-muscled men swing quickly into action. Hatches open; tons of shrimps or bananas or rice come boiling up from the dark holds, whiz down the conveyers and pile into the waiting trucks.

Mom never pined for the easy

life. "We're put on this earth to accomplish something," she says. "To work hard and well at things worth doing is to know life's greatest satisfaction."

She has always lived that philosophy. How well she has succeeded is plain to see by the triumph in her eyes as she stumps around on a bad leg which, seven years ago, doctors said she'd never walk on again. She owns and runs three thriving businesses: her stevedoring operation, a shipping concern (sea and air) and an aircraft-parts firm.

Born Irma Goebel, Mom was a little girl when her father, a university professor, taught her that challenging, difficult work is a privilege and the wasting of time and talent a cardinal sin. By the age of eight she was speaking three languages fluently. In her 20's she was a pianist soloing with symphony orchestras in America and Europe. Later, after moving to South America with Dad, she travelled some 65,000 miles a year with him—mainly by ship, even by donkey—to help him with his car-export business. She had enough energy and curiosity left over to become a contributor to the New York *Times*, a collector of primitive music and an explorer.

When I was born, my parents had returned to the States and were living in Montclair, New Jersey. Mom, in her 30's, was becoming an acclaimed folk-singer. For the next 25 years she was active in the movement to bring rare Latin-American music to the United States. I was five when she took me on a research trip through South America. At Mollendo, Peru, where our freighter arrived one stormy afternoon, there were no wharves to tie up to. The only way to get ashore was to be lowered over the side in a chair dangled from the ship's boom to the small boats bobbing and pitching in the Pacific swell below.

Most passengers looked at the angry combers, the tiny, lurching boats, and refused to disembark. Mom said, "Come on, honey. This is going to be fun!" So, over the side we went, like two bundles of freight. We pushed into some wild, out-of-the-way places on that trip, but Mom never seemed to worry. And her assurance was contagious.

By the time I was 16, I thought I knew all about Mom's brand of courage. I didn't at all—not until things began to go wrong. That year she and Dad came to a parting of the ways. Mother made a complete break with the past. Though she was no longer young, she took me and struck out for Miami to create a new life for us. "Work is the best thing for troubles," she said.

To obliterate the past, Mom deliberately sought out jobs that were different from anything she'd ever

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ANNE BOWES holds degrees in wildlife conservation and in big-game management. She and her husband conduct Caribbean Wildlife Tours for nature lovers in the winter, run a mountain holiday resort in the summer.

done before. As manager of a wholesale reptile firm, she escorted snakes and alligators to television shows and checked cobras to see if they were properly "fixed" (defanged). Among her duties was feeding 600 baby alligators in the middle of the night. I'll never forget those midnight trips we made to the reptile warehouse. The place was dark, and as we fumbled for the light-string overhead, alligators grunted, rattlesnakes rattled, boa constrictors thumped their heads against their cages. It took Mom about an hour to fillet 25 pounds of fish and grind it up for the baby alligators.

On these visits we were often in evening dress; for, at the same time, Mom had organized the First Inter-American Music Conference, with headquarters in Miami, and she was whipping together a choir. To get the feeling for one of the magazine articles she was also writing, she zoomed into the sky with the U.S. Navy's jet stunt team, the Blue Angels—one of the first women ever to make such a flight. "You can learn something important from anything that happens to you," she once said to me. Her words were to prove prophetic.

In a few years, after doing an incredible number of unusual jobs at once, Mom became manager of an aircraft-parts company whose owner gave her an almost free hand with the business. Delighted, Mom quickly became an expert on cargo planes, their payload capacities, fuel consumption and so on. Soon she started her own spare-time business —the shipping of livestock by air. Her first commission was to ship 300 mules from Kansas to Burma. Then came an order to fly 100 pigs a week from Mississippi to Guatemala. Soon she was airlifting race-horses, prize turkeys and Brahman bulls.

By late 1956, the future looked bright. Mom had created a fine position for herself in a major shipping company. She was in high spirits as she took off for a business conference in Central America.

Then catastrophe struck. Between planes in El Salvador, she slipped on a tile floor, shattered her right leg, and critically injured her back. Flown to a Miami hospital in a plaster cast, she was told by a doctor, "You'll never walk again." It looked as if the "new life" she had so magnificently begun was over.

I was away at college then, and not a word of her accident did I hear until my next visit home. Mom faced her plight alone, with nothing to lean on but her courage.

Five days after a critical operation, she analysed the situation. "Nobody is going to employ a helpless cripple who's no longer young," she told her doctors. "So, I'm not going to be helpless. I'll start my own export business here in the hospital."

Within 24 hours she had a bank loan and her licences. Then, lying flat on her back with her leg in traction, a telephone at her elbow and a

typewriter slung above her chest, she began working out a series of deals from her hospital bed. Through business connexions, she learned that the Venezuelan Government was about to ship 100,000-dollars' worth of cattle from Cuba. Mom, after gambling 354 dollars on overseas calls, got the contract. Giving instructions by telephone, she moved the cattle herd from Camaguey, Cuba, to Maiquetía, Venezuela, by shuttling two cargo planes back and forth across the Caribbean.

Then she arranged to fly Florida livestock to Ecuador, and to bring back planeloads of pineapples, bananas and shrimps. She re-established her old contacts with Mississippi ranchers and shipped pigs for them to Cuba and Guatemala. She welcomed the frustrations as well as the triumphs of her work, for both distracted her from the torture in her leg and back.

In six months of remote-control shipping from her bed, Mom's net profits were about 10,000 dollars—and enough improvement to hobble out of the hospital on crutches. As she left, her doctor suggested that she get a wheelchair. Mom's eyes bored levelly into his. "I will not!" she said. And she never did.

In a few days she had engaged a practical nurse as a chauffeur and was on her way to the Miami River docks. Mother had decided to charter ships as well as planes to carry her cargoes.

Competition on the waterfront that blazing summer of 1957 was keen, and dock space was scarce. Yet Kate Thornhill somehow worked her way into this "closed" world. Salt from Turks Islands, in the Bahamas, was her first ship-imported cargo. When the skipper who was to haul it asked her to be his ship's agent, she said "O.K.," although she had never tackled that particular job before. Two days later, when the 160-foot, 350-ton vessel arrived, she had learnt enough to bring it into port correctly, arrange for its dock space, refuel it, handle all paper-work and get it on its way. (She has been ship's agent for hundreds of vessels since.)

A little later she overheard a shipper complaining to his Miami importer about having to pay 16 dollars a ton in Miami to get his shrimp cargoes "stevedored"—that is, properly discharged. Mom did some quick reckoning. "I'll stevedore those shrimps for five dollars a ton," she told the importer. She rustled up 16 longshoremen, rented some conveyers and earmarked the trucks for the job. When the boat slid alongside the dock, what had always been a man's job was quickly dispatched —by a woman on crutches.

Soon she was getting a lot of such jobs and, meanwhile, other important progress was made. From crutches, she graduated to two sticks, then to one. Two years after leaving hospital, she got "too busy to fool with a stick any longer," as she put it. Impulsively, she threw

her cane into the Miami River one day and watched it float away. She has never since used any assistance.

Mom's tough approach to life left me free to finish college, marry, and live my own life. Yet, every time I visit her, I marvel again at her waterfront adventures. Today she considers her biggest and most important task that of heading the drive to clean up the Miami River. Four years ago, she pointed out that the river was a smelly, unattractive mess. Forming a citizens' committee, she got the Press and public opinion behind her to do something about it.

Immediately she was threatened by men who felt they couldn't be bothered to scrap their rusting, rat-infested derelicts that were choking the river. Some companies were reluctant to install proper waste-disposal plants. An anonymous telephoner told Mother, "You lay off this river crusade—or else." The next day she found spikes driven into three of the tyres on her car.

The opposition was wasting its energy. Mom's efforts have resulted in the establishment of a strong, permanent Metro-Miami River Advisory Board, of which she is chairman. This board is fighting to get more teeth put into local laws, and to see that they are enforced—with special attention to pollution control, debris collection (a debris-pick-up boat now sweeps the river five days a week) and a 24-hour police patrol of the river. Already the river has become a markedly more eye-appealing, more efficient waterway.

As if all this weren't enough to give a daughter an inferiority complex, Mom is now learning to handle a tugboat. "Looks like it'll be fun," I heard her say to a tugboat skipper the other day. "Yeah, Miss Kate," he cautioned, "but it ain't easy." Mom gave him a withering look. "And why," she asked, "do you think I'd want to do it if it were *easy?*"

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—From the Omaha *World Herald*

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—From the Mercer Island, Washington, *Observer*

Boom Trading in Postage Stamps

More people than ever before are finding pleasure—and profit—in stamp collecting

By Rex Grizell

As midnight approached last May 15, scores of stamp collectors crowded into London's all-night Post Office in Trafalgar Square. They queued to snap up the G.P.O.'s special Nature Week stamps which went on sale immediately after midnight. The first day of every issue of stamps always brings a rush of eager collectors to the sale windows of Britain's 25,000 Post Offices. The Postmaster-General has in fact turned the tide of stamp-collecting enthusiasm to the advantage of Post Office finances. The six special issues of 1963—the most the G.P.O. has ever released in one year—made up a total of 12 new stamps which sold in millions to buyers who wanted "first day of issue" items in their collections.

Stamp collecting is booming for several reasons. First, it is cheap. Buy an inexpensive album, some stamp mounts, and a packet of a thousand mixed "foreign and colonials," and you are in business. Second, stamps are compact. However large or small its value, there it is in a volume you can carry under your arm. Many famous collections have been so carried. When Agathon Fabergé, son of the Tsar of Russia's Court Jeweller, fled to Finland during the 1917 Revolution, he took with him his famous stamp collections. These were sold in London at the outbreak of the last war for £20,000 (Rs. 2·7 lakhs)

Adapted from an article by John Tunis in The Elks Magazine

Today they would fetch £200,000 (Rs. 27 lakhs).

For those with imagination, stamps are keys to history and the romance of far-away places. Others look upon stamps as small works of art. Some collectors are fascinated by the masterly printing of fine stamps, while others are enthralled by the detection of printer's errors which may be worth a small fortune.

It is a hobby of endless variety, frequent surprise, and an occasional jackpot. Last year a 1927 five-centesimi Italian colonial stamp, worth £1,300 (Rs. 17,000), was found in a shilling "schoolboy packet." Two more of these stamps are still at large.

You can take up this absorbing pastime with a capital of Rs. 3 or Rs. 30,000, starting at the age of nine or 90. That is why, every year, so many children start a collection and older people take up the hobby seriously.

In Britain in the past ten years the number of shops selling stamps has trebled and the stamp sales of one leading wholesaler have almost doubled, at 100 million. The circulation of stamp magazines rises steadily, and dozens of new philatelic clubs have been formed.

So great is the demand from collectors and dealers all over the world for current British stamps that the G.P.O. has had to set up a special Philatelic Bureau. Its controller, Francis Langfield, says, "Since we opened last May, the volume of business has increased sixfold and shows no signs of falling off."

This mounting interest is fuelled by the consistent rise in stamp values. On average, the capital value of a good collection of "gilt-edged" stamps can be reckoned to double every 12 years. In the case of some individual items, the increase is much faster. The 1929 British £1 Postal Union Congress stamp, for example, has reached a value of £12 in 14 years, while the 4*d*. Parliamentary Conference stamp of 1957 is now priced at 2*s*. 6*d*. Sometimes unusual circumstances produce spectacular rises. In 1961, when the Atlantic island of Tristan da Cunha was devastated by a volcanic eruption, the St. Helena postmaster decided to overprint some stamps "Tristan Relief" and sell them at 5s. a set—double their face value. Within a week the Colonial

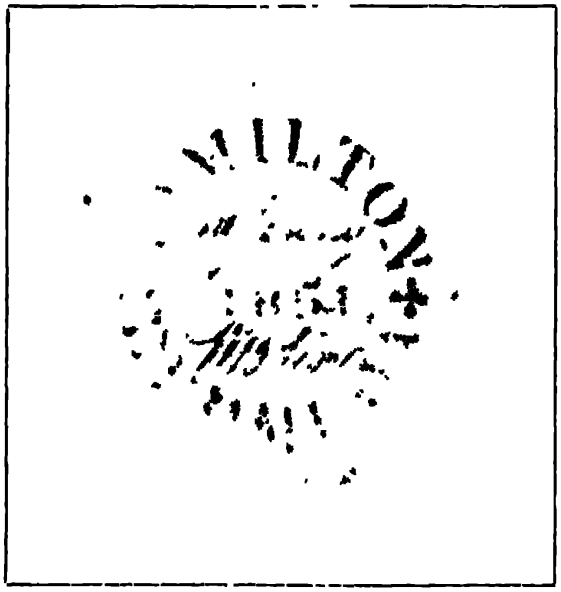


Tristan da Cunha ten-cent stamp overprinted "St. Helena Tristan Relief"

Office had sent orders to stop him, but by then 434 complete sets had been sold. One resident who spent £1 on four sets, received £125 for each set in London a month later. Today, similar sets fetch £200 (Rs. 2,700).

It is no accident that hundreds of rich men collect stamps. Good stamps suffer less in economic depression than almost anything else

ROBSON LOWE



Bermudan 1854 penny red

that can be collected. The biggest collectors combine financial investment, interest and relaxation in their hobby, and are often secretive about their holdings. Stamps can be valued for death duties at well below true market price, and executors of an estate can spread the disposal of a large collection over years, with the stamps increasing in value all the time.

"For fifty years London has been the happy hunting ground of the world's leading collectors—the first place they look to for their needs," says Cyril Harmer, whose Bond Street, London, firm has handled many of the rarest stamps.

The combined turnover of London's dealers reached a record £5·5 million (Rs. 7 crores) in the last financial year. It included such items as the Bermudan penny red that came from a Swiss collection to be auctioned by Robson Lowe, of Pall Mall, who knocked it down to a well-known Italian collector for £11,000 (Rs. 1·5 lakhs). A few months earlier, Harmer Rooke, of the Strand, sold an unused penny Mauritius to a Japanese collector who cabled a headline-hitting bid of £8,500 (Rs. 1 lakh).

The soaring prices of rare stamps, reported in the Press throughout 1963, reached a new peak last October at a £94,000 (Rs. 13 lakhs) sale held by Robson Lowe. The American dealer Raymond Weill gave £28,000 (Rs. 4 lakhs) for a unique envelope carrying two 1847 Mauritius stamps with the words "Post Office" in error for "Post Paid."*

Earlier in the year, in New York, Weill had already paid the world-record price for one stamp—an 1851 pale blue two-cent Hawaiian "Missionary" which cost him a sum approaching Rs. 2 lakhs. This stamp, of a kind used by Christian

* The error is said to have been caused by the wife of the colony's Governor, who made the engraver hurry to get the stamps finished in time for her to use them on the invitations to a fancy-dress ball at Government House.



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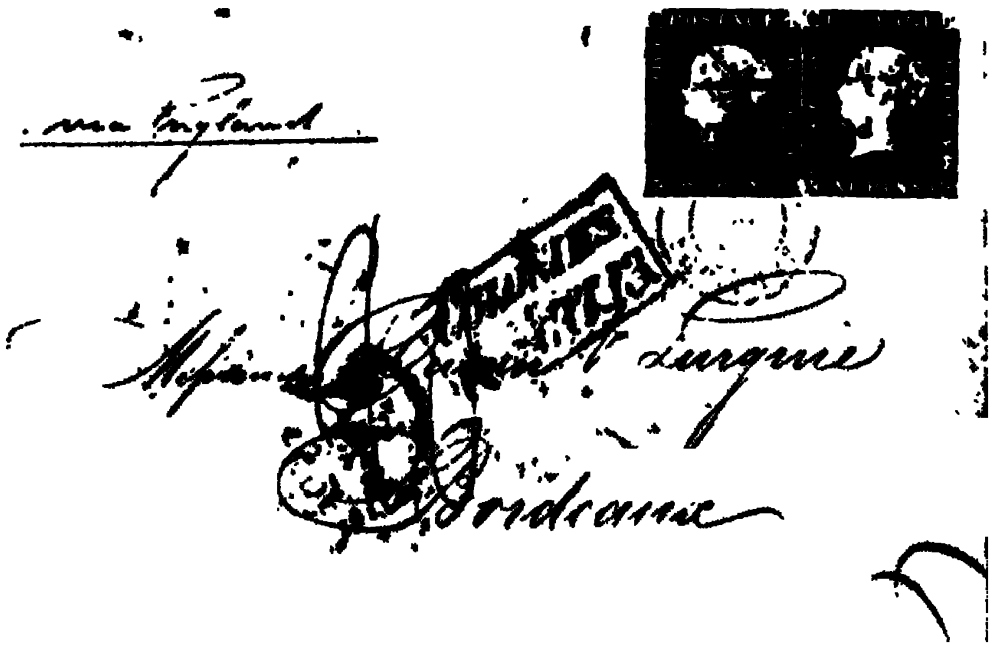
SU 44-483

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missionaries for their letters home, was already a rarity in 1892 when Hector Giroux murdered a fellow collector in Paris for one.

Stamp collections are of two kinds, general and specialized. Some of the richest and keenest of the early collectors were able to showing flowers, animals, trains, ships or heraldry. There are collections devoted to music, literature, economics, and collections of misprinted stamps.

Leslie Fletcher, of Bexleyheath, Kent, has a reference collection of more than 100,000 forgeries; and



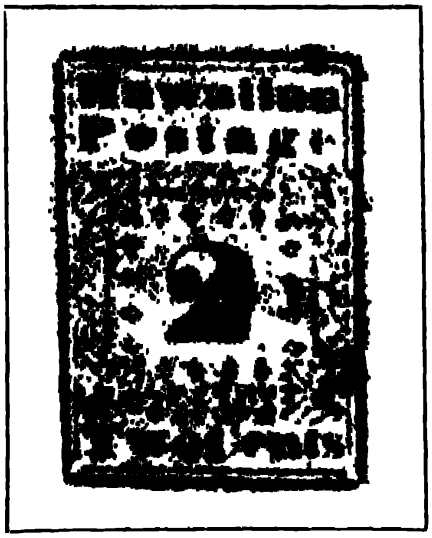
Unique envelope with two 1847 Mauritius stamps printed "Post Office" instead of "Post Paid"

make general collections containing copies of almost every stamp then issued. But as stamp issues multiplied this became impossible even for multi-millionaires. Nowadays all serious collections have to be limited, either to single countries or continents, or to specific themes, such as airmail items, or stamps

recently Harmer's of Bond Street, London, auctioned a collection of "upside-down" stamps. There were only about 400 of them but they were sold for £10,700 (Rs. 1·4 lakhs). "If the stamps had been printed the right way up," says Cyril Harmer, "they would not have fetched £10."

Stamp collecting has long been a

pursuit of royalty. The royal families of Russia, Italy, Belgium, Romania, Sweden, Spain and Egypt all amassed important collections. Estimates of the value of Britain's royal collection, started by George V when he was Duke of York, begin at £1 million (Rs. 1·3 crores). The King once described how his best stamp, the twopenny Mauritius blue of 1847, had been found in a schoolboy's collection and sold for £1,450 (Rs. 19,000). "Who was the fool who paid 1,450 gold sovereigns for what is after all only a bit of paper?" asked one of the royal equerries. "I was," answered George V.



Hawaiian 1851–2 "Missionary" two-cent blue

The world's largest stamp collection—at least half a million items—is in the British Museum. It includes a permanent loan from Britain's G.P.O. of 100,000 of the "complimentary copies" of mint foreign stamps sent to the Post Office by all member countries of the Universal Postal Union since 1874. The total collection is so extensive that not even James MacKay, the curator, knows the exact number of stamps in it.

Sir Rowland Hill



Before adhesive postage stamps were introduced, Britain's Post Office operated a letter delivery service. You paid when receiving the letter. If it had come a long way, the charge could be as high as 10*s*. (Rs. 7). In the early nineteenth century people often refused to accept their letters, or cheated the Post Office by writing the address in such a way that the recipient understood the message without needing to open the envelope. In 1837 Rowland Hill suggested that postage rates should be standardized, starting as low as a penny, and that a stamp be affixed to every letter. It was a revolutionary idea, but Parliament eventually accepted it, and on May 6, 1840, the first of all adhesive postage stamps appeared.

Sir Rowland Hill —the success of his scheme won him a knighthood — must therefore be considered the father not only of the postage stamp but also of international stamp collecting.



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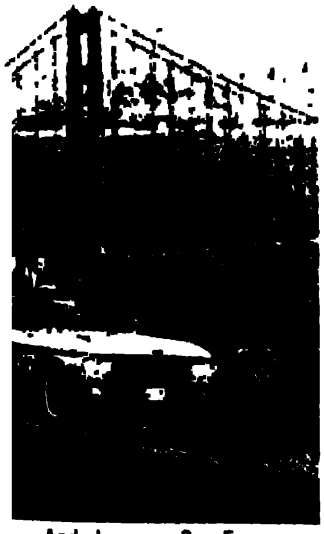
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The Haunting World of ANDREW WYETH

Profile of the artist who has been called the greatest living American realist

By Roul Tunley



ANDREW WYETH is not a man to stray far from his studio or home. In the winter his whole world is the tiny village of Chadds Ford, in Pennsylvania. In the summer he and his wife and two sons live in Cushing, Maine. "I haven't yet plumbed the depths of what's around me. Why shouldn't I stay in one place and dig a little deeper?"

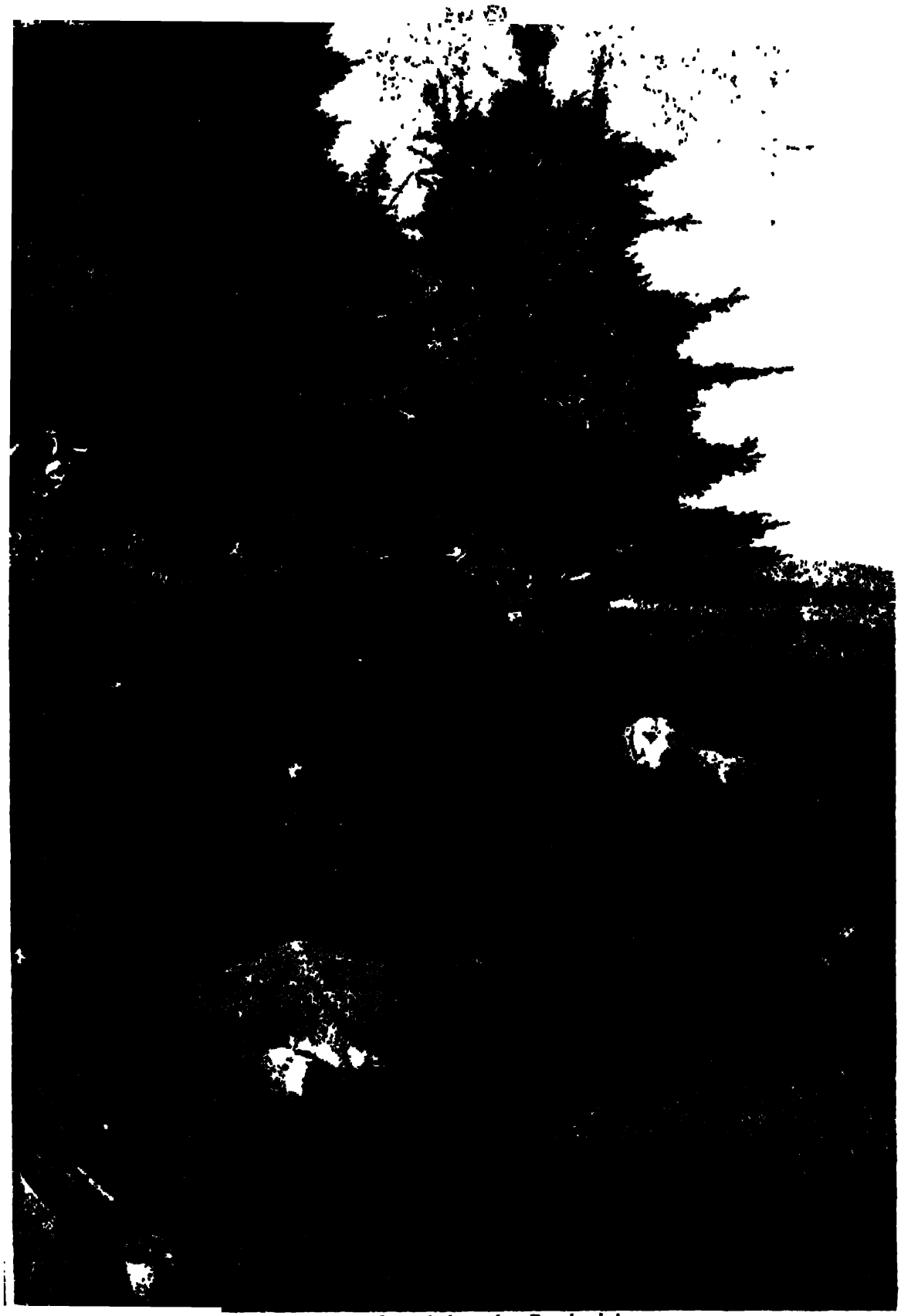
Far from finding this approach parochial, the world seems to agree with him. For Wyeth, the unquestioned leader of America's realist school of painting, has become probably the most successful of contemporary American painters. Last October one of his pictures was sold to the William Farnsworth Library and Art Museum at Rockland, Maine, for 65,000 dollars—the highest price ever paid by a museum for a work by any living American From private collectors, his pictures fetch still higher figures.

More significant than the cash value of his paintings is the spell this artist casts upon the public. Last year, when a Wyeth exhibition was held in the Albright-Knox Art Gallery in Buffalo, New York, for five weeks, a quarter of a million people flocked to see the pictures—at least 100,000 more than had visited the museum during any previous entire year.

Wyeth's work appeals to experts and non-experts alike. It also appeals, curiously enough, to the

Condensed from Woman's Day

"DISTANT THUNDER" (1961), MRS NORMAN WOOLWORTH, NEW YORK



The artist's wife and their dog Rattler lying on the grass behind their home in Cushing, Maine

abstract expressionists who have recently been riding high in the market-place. If the trend of painting reverts to a more realistic style (a situation that many believe is now taking place), Andrew Wyeth will have had a good deal to do with it.

To call him a realist, however, is to do him an injustice. He doesn't paint just what a person sees. One of his pictures may be a barn and *look like a barn,* flawlessly drawn, but it is also something more. It is



Jamie, Wyeth's younger son, shown here in one of the fields they love to roam together

a barn that suddenly makes life move a little faster and lifts you up to a new plane of experience. When you buy a Wyeth barn you get a whole lifetime of experiences. Each time you look at it, memory plucks some string and a whole cascade of personal experiences comes tumbling out of your subconscious.

People sometimes ask Wyeth to come and paint their mountain or valley. "It's so beautiful," they insist. He invariably refuses. "It may well be beautiful," he says, "but *I* have to *feel* it." It is this quality of remembered emotion that is the essence of his art. And it is for this reason that he rejects abstract painting as the ultimate in art. "I like abstractions up to a point," he says. "I like their movement and their excitement. But why limit yourself? Why not tell the whole story?"

Wyeth learned to draw as a boy, in the studio of his father, N. C. Wyeth, the famous illustrator. There he sketched from casts, from models and from nature, becoming a draughtsman of rare skill. At 20 he held his first show in New York. It was a sellout and, ever since, people have been more or less queueing for his pictures.

Wyeth is the friendliest of neighbours and spends hours talking to the farmers, the tradesmen, the children and the others living around him, but I found him a hard man to interview. He doesn't want anecdotes printed about him; he feels they detract from what he is trying to say in his pictures.

His most famous painting, for example, depicts a slight woman, half-sitting, half-lying, in a field, and looking up towards an old frame house at the top of a hill. The woman is Christina Olson, a polio victim, who is a neighbour in Maine. The picture came into being because one day Wyeth looked out

"FAR AWAY" (1952), MRS ANDREW WYETH

of his window, saw her in the grass, and something about her stirred memories in his own breast and made him long to paint her. Wyeth never gave any further explanation for the work beyond titling it "Christina's World." Speculation about the "meaning" of a painting, he believes, makes it too pat, too programmatic.

One of the exhilarating things about visiting Andrew Wyeth is seeing all the familiar things in his paintings suddenly spring to life: his attractive wife, Betsy, their two sons, Jamie and Nick, the dogs, Rattler and Eloise, and the old mill, the bare trees, the stone walls, the sparse but articulate hills, even the old boots and the laundry basket.

Five years ago Wyeth bought the mill as well as the granary and the miller's house. Slowly and painstakingly he is restoring them. When the work is finished, the Wyeths will live in the miller's house; the granary where they now live will serve as a studio.

We sat before a roaring fire in the old stone granary. There were no carpets on the stone floor, no curtains at the deep windows, no flowers on the table, but somehow the simply furnished room had extraordinary warmth and personality.

As I listened to my host it became clear that here was a man possessing not a sentimental longing for the past but a deep, realistic, abiding love that ran through his whole fabric. He lives among, and loves to paint, not quaint artifacts, but the essential details of life. And perhaps it is because he deals in essentials and reduces things to their simplest forms in his pictures that his paintings evoke response.



To Wyeth, the iron shaft of the lightning rod, spiked through the amber ball, was like a storm signal that always stayed up

Wyeth has the technical equipment to be the slickest of painters,

"NORTHERN POINT" (1950), WADSWORTH ATHENEUM, HARTFORD, CONNECTICUT, SUMNER COLLECTION

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but he never settles for the quick effect. He approaches his calling with unusual humility. "I know it sounds trite," he said, "but you almost have to be on your knees before the thing you're painting. If you're primarily interested in exploiting your medium or your technique, the thing just doesn't come off. I can say this because it's happened to me at times."

One thing that keeps Wyeth on his professional toes, he claims, is strong competition in the family. His son Jamie, now 17, has been working for several years in his father's studio and gives every evidence of being enormously talented. "Some day," says Wyeth, "I'll probably be famous as Jamie's father."

Another strong factor in helping Wyeth keep a sense of proportion in the face of increasing adulation is a natural kind of humour. Although he's dead serious about his craft, he never takes himself too seriously. Last year, for example, his Christmas card showed a museum room full of wild abstract paintings—and one Wyeth. A visitor, looking suspiciously as though he'd just stepped out of one of Picasso's canvases, was standing in front of this lucid bit of realism, saying, "I don't get it."

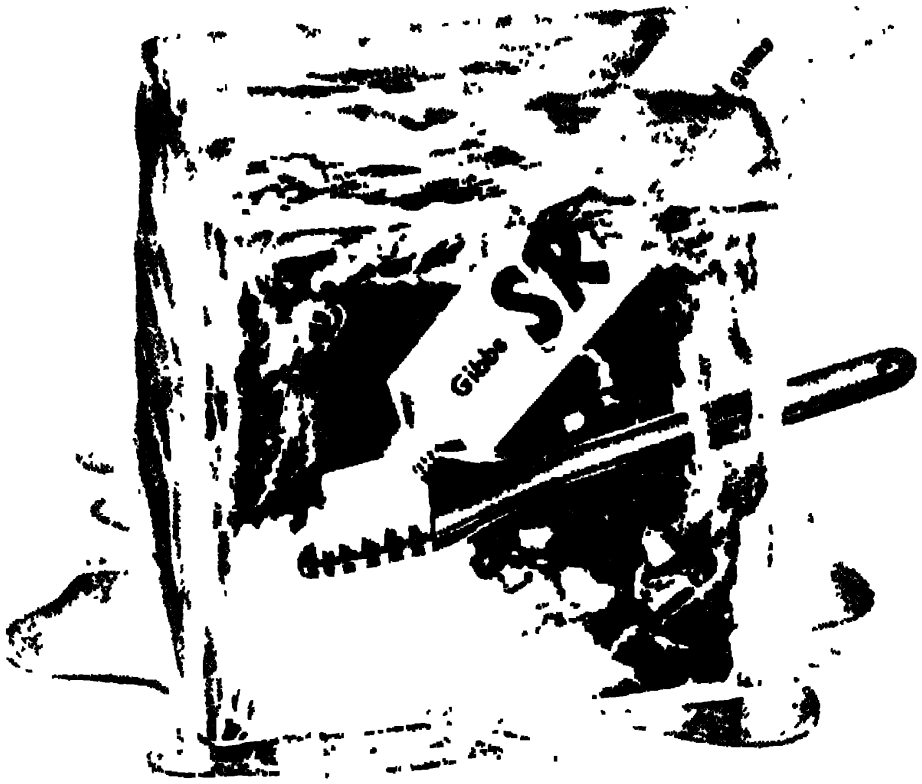
With the arrival of fame, Wyeth is a target for all sorts of schemes which, although flattering and lucrative, would take him away from "Wyeth country." But there seems little danger that anyone can keep him for long from that tiny piece of countryside which holds all the secrets and the mysteries that he needs for his art.

In Other Words

A BOOKLET called *Sixteen* has been published in Britain, designed to explain parents to teenagers. It begins with translations of parent talk. For example, if a parent says, "This is a fine time of night to get home," it means: "I've been worried about you. Why can't you warn me another time if you're going to be late, so that I don't have to sit here imagining all sorts of awful things are happening to you."

When a parent says, "I don't know what young people are coming to these days," it actually means: "Please tell me a bit more about the way you think and feel because things are so different nowadays and it's very trying not being able to understand people you love." —UPI

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LIFE'S LIKE THAT

When my husband was transferred to a new job, a long air trip lay ahead for our family. Before we got on the plane, our neighbours handed us a surprise package for our three children to open after we had been in the air for an hour, thinking that by then they would need some entertainment. But curiosity got the better of them, and the children started asking the time every few minutes. The stewardess overheard them, and so they told her about the box.

She was about to move on when a thought struck her. She leaned over and said to me quietly, "I do hope the neighbours *liked* your children."

—Mrs J. B. P

During the war I was asked to sing at a servicemen's hospital. As I am barely five-foot-one with high heels, and my accompanist was a beautiful girl nearly six foot tall, I thought we would be greeted with laughs as we walked onstage. Instead, we received a generous round of applause, and I heard a boy in the front row exclaim appreciatively, "That's what I like to see—a supply for every demand!" —Mrs. R W.

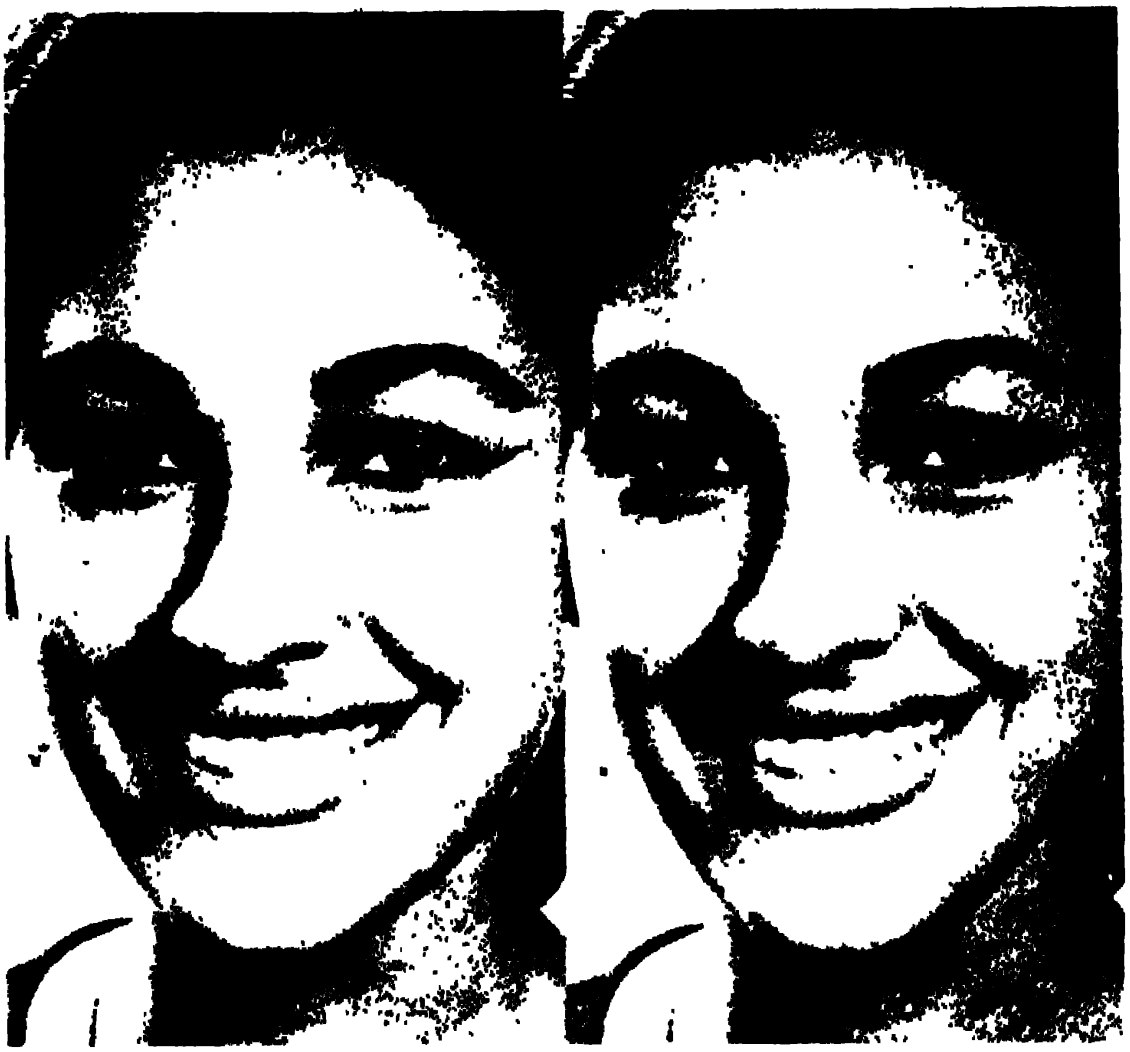
Rushing home from the theatre one night, I barely managed to catch the last train home. After it had started, however, it came to a halt for more than an hour. I became quite upset, thinking how worried my husband would be about my lateness. The guard, noticing my distress, said, "Don't worry, lady. I'll give you a note for your husband." —Jo Zipes

For the first three months of our marriage, my wife continued working in a local-government office. On her first morning at home after she had resigned her job, I was amused to see that she was going to make something out of her new title of housewife. Her engraved nameplate, which had been on her desk for many years at the office, was now set authoritatively on the kitchen stove. - Gary Mills

While trying to get back my land legs after an operation, I wandered down the corridor of the hospital into the rest room. Noticing a business card lying on the table, I picked it up, and was startled by the message on the back of it. It read: "HELP! I'm being held a prisoner in Room 412."

Naturally, I couldn't resist looking into this room, where I discovered a fellow sufferer with one of his legs and both his arms in traction.

"Come on in," he called as I hesitated at the door. "You're the fifth visitor I've had today. I'm a stranger in this town, and my wife wrote that message for me. She thought I might need some company before she got back to see me this week-end." —D. C.



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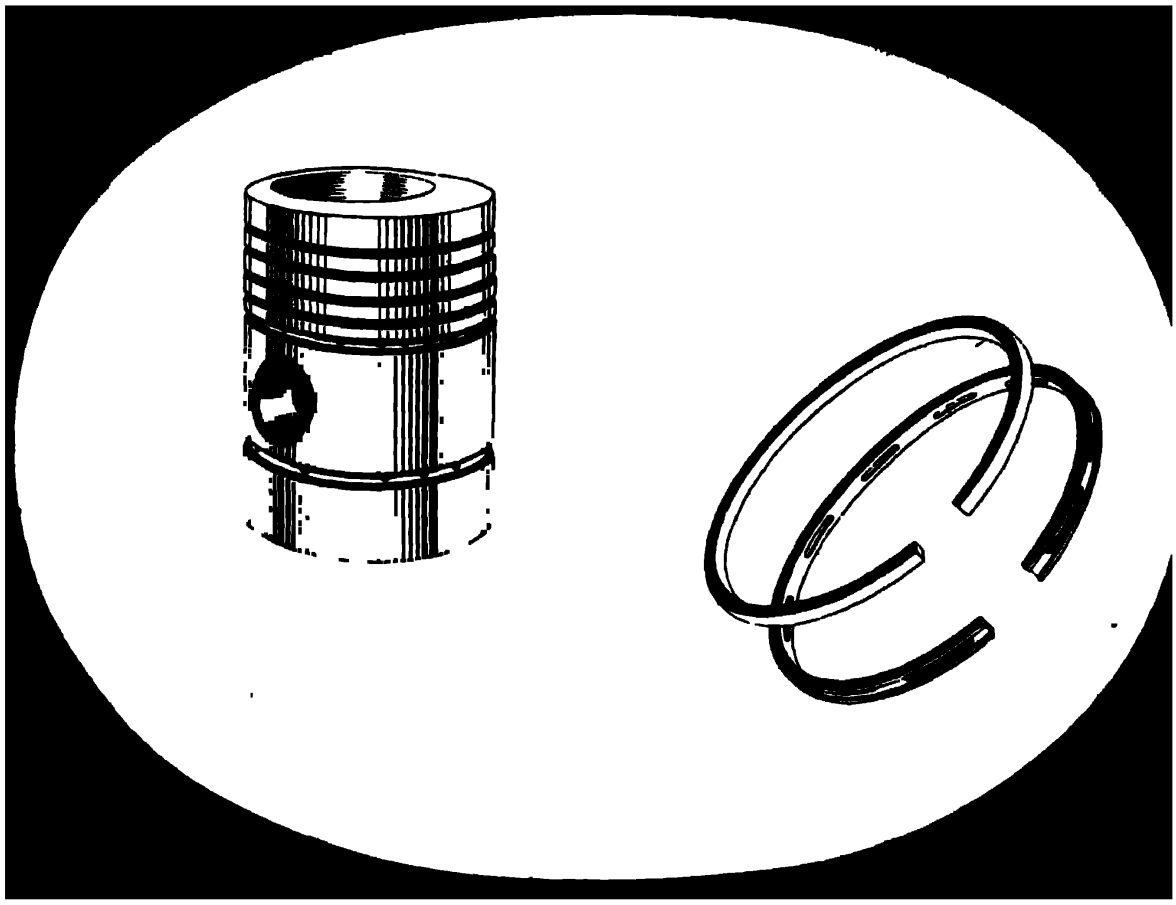
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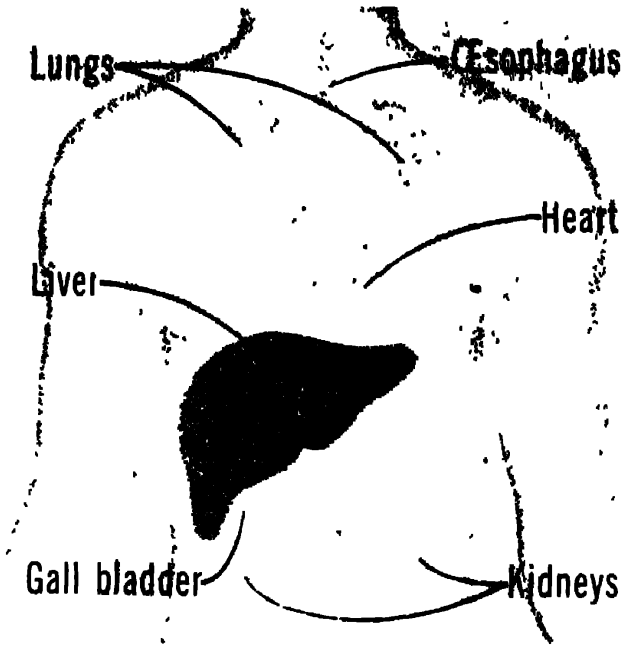
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What Your Liver Does for You



It is a chemical wizard whose manifold magic performances save your life every day

By J. D. Ratcliff

Of all the wondrous organs of the human body none performs the number of awesome, life-giving exploits that are the ceaseless function of a three-pound gland tucked under the ribs on the right side of your body—your liver.

When you walk up a flight of stairs, your muscles need fuel to turn into energy. At once, the liver responds. From its 24-hour supply of glycogen, or animal starch, it converts a portion into glucose, the fuel for muscles, and feeds it into the bloodstream.

Each second, ten million of your red blood cells die and must be disposed of. The spleen breaks them down; then the ever-active liver helps to salvage the component parts, such as iron for re-use in building new blood cells.

If you cut your finger, you would bleed to death—were it not for the liver, which produces the fibrinogen and prothrombin that help to clot blood. The liver also manufactures antibodies that fight invading viruses and bacteria. Without these antibodies, even the smallest pimple could be a sentence of death.

Each second this amazing gland performs chemical magic almost beyond imagination. More than 500 liver functions have been catalogued to date, and new ones are constantly being discovered.

Condensed from Family Doctor, published by the British Medical Association

The liver's job for the muscles doesn't end, for instance, with the fuelling process. When the muscles burn the glucose, they produce lactic acid, which would poison the entire body if permitted to accumulate. The liver helps to solve the problem by salvaging lactic acid and converting it back into glycogen.

A strip of bacon eaten for breakfast launches a highly complex chain of chemical events in the liver. Bile from the liver, emptied into the intestine, helps in the digestion of fat. Intestinal enzymes break fat down into fatty acids, which may then be carried to the liver to be built into body fats. In the gastro-intestinal tract, meanwhile, proteins from lean strips in the bacon are broken down into their component amino-acids. The liver reconstructs these building blocks into plasma proteins, to supply the body's tissue-building needs. Protein digestion, however, like the burning of glucose, has a potentially deadly by-product, ammonia. The liver again intervenes: it converts the ammonia into urea, which the kidneys can excrete.

We constantly consume potentially lethal poisons—alcohol, nicotine, drugs. The liver detoxifies them, renders them less harmful.

The liver also helps to keep us in hormone balance. Without it, too much of the hormone from the thyroid gland would make us jittery skeletons. The liver destroys the dangerous excess. And the liver acts as a storage bin for essential vitamins—A, D, the B-complex.

Evidence of the importance of this largest of the body's glands is that some 25 per cent of the heart's energy is expended in supplying it with blood. Only the lungs have a richer supply. As with other organs, freshly oxygenated blood is carried to the liver by arteries. But, in addition, venous blood from the intestines goes to the liver before being shunted back to the heart, so that dangerous substances can be removed.

The liver is also distensible. If there is an excessive accumulation of blood which might overtax the heart and smother its pumping action, the liver, acting as an elastic reservoir, temporarily absorbs the excess.

In view of its importance, the liver fortunately possesses enormous regenerative powers. As much as 90 per cent of the liver has been removed in extreme cancer cases; within a few months the gland grows back to normal size.

Because of the vast array of the liver's jobs, diagnosing liver trouble is one of medicine's trickiest tasks. A sick liver produces symptoms like those of a dozen other diseases: cancer of the pancreas, stomach or intestine; ulcers, gall-stones. In the early stages, symptoms are vague: lassitude, mental confusion, nausea.

Only when severely injured does the liver give unmistakable evidence of its troubles. Functioning



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liver cells, destroyed by disease, are sometimes replaced by useless scar tissue which blocks blood circulation. Blood pressure in the abdominal region rises, and fluid leaks from capillary walls into the abdominal cavity; tapping the abdomen surgically may drain off a gallon or more. As the sick liver falls down on its job of manufacturing blood-clotting factors, haemorrhage may occur along the digestive tract. Vascular "spiders"—dilated blood vessels under the skin—often appear on the face and upper body.

Until recently, such symptoms were harbingers of death. Three out of every five people in whom they occurred were dead within 12 months. Enormous advances in liver knowledge during the past ten years, however, have radically altered this grim picture.

Says Dr. Alexander Richman, of the Liver Clinic at New York's Mount Sinai Hospital, "Given good medical care, most of these patients can today expect a fruitful, comfortable life."

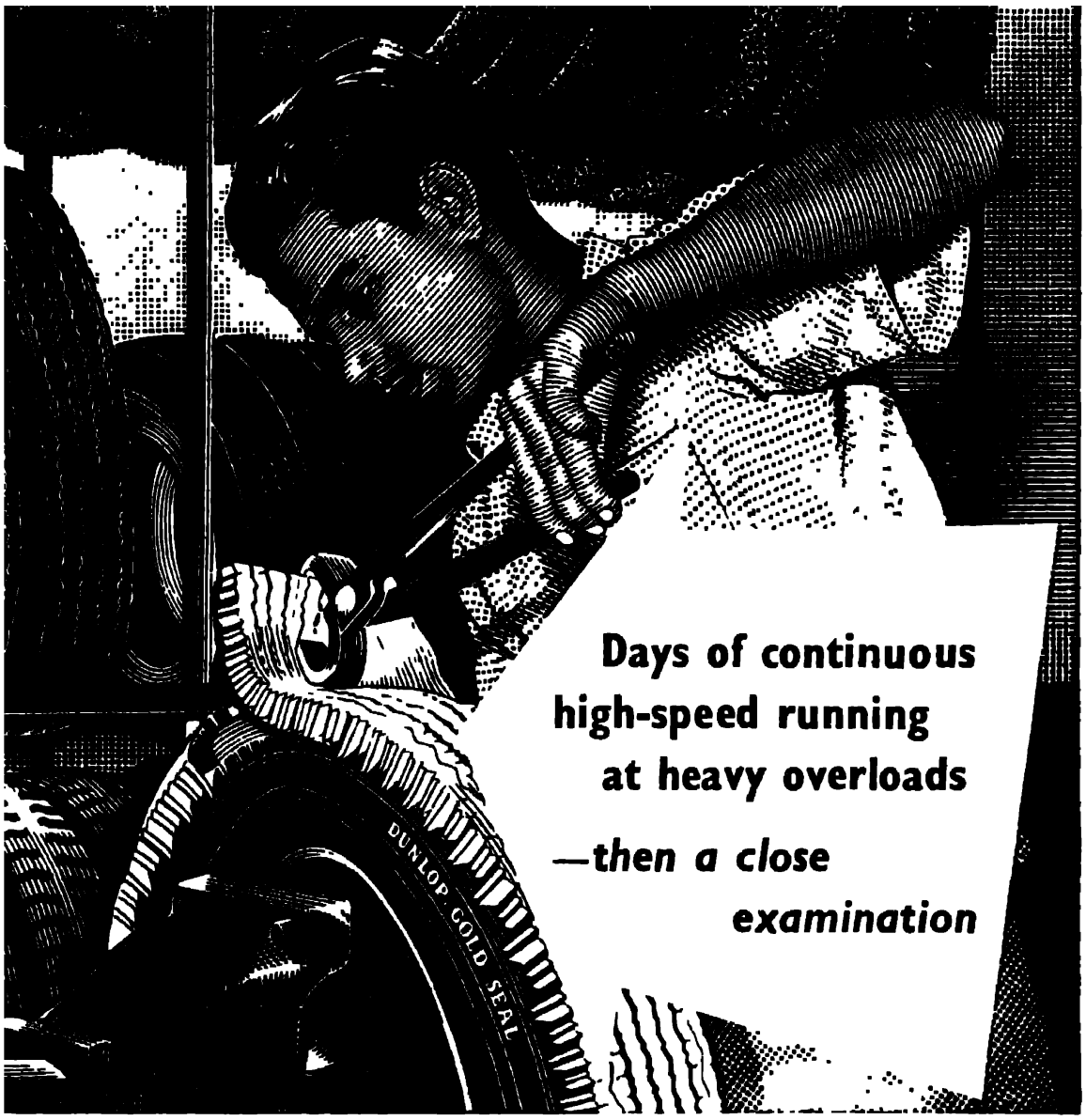
Even greater strides have been made in detecting liver trouble in its earliest, most curable stages. Dozens of ingenious tests have been devised to ferret out liver secrets. In one, the dye bromsulphalein is injected intravenously. Within 45 minutes the normal liver should destroy 95 per cent of this mildly toxic stuff. If a blood sample taken after this interval shows that it has not done so, something is wrong. In a more recently developed test, radioactive rose bengal, another dye, is injected. A scintillation counter pressed to the skin over the liver tells how rapidly it is being passed into the intestine.

The most conclusive of all liver tests is the needle biopsy. Under a local anaesthetic, a hollow needle is passed through the skin and into the liver. Microscopic examination of the core of tissue brought out by the needle gives clinching evidence of what is happening inside the organ.

Liver disease, according to *World-Wide Abstracts of General Medicine,* "is probably the most common serious chronic illness facing the world today." What are the major varieties?

Jaundice, often considered a liver disease, is actually a symptom. Anything that causes massive destruction of red blood cells—yellow fever, snakebite, malaria—also increases the formation of bile pigments and can tint the skin yellow. The tinting means that when red blood cells are being destroyed too rapidly, an excess of bile pigment is circulating in the blood and being deposited in the tissues.

Obstructive jaundice traces to blockage of the bile flow in and out of the liver: stones collecting in the bile ducts or in the gall bladder block the pathway from liver to intestine, causing bile to back up into the bloodstream. Doctors have little difficulty in recognizing this

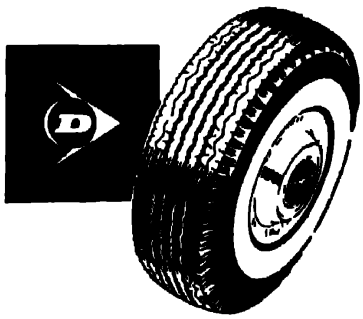


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condition, or in taking surgical measures to correct it.

In cirrhosis* of the liver, functioning liver cells are destroyed and replaced by useless scar tissue. For years the disease was called "gin-drinker's liver," because it commonly strikes alcoholics. Today's doctors tend to believe that the chief culprit is the heavy drinker's failure to consume an adequate diet.

The disease is common among non-drinking Moslems, and the rate is far higher in rice-eating Asia than in meat-eating countries, indicating that lack of protein and lack of B vitamins in the diet are key factors. In the laboratory, rats fed on protein-free diets develop cirrhosis. But they develop it more rapidly if also given alcohol, so the latter does appear to play some role.

Hepatitis, another liver disease, is less often fatal than cirrhosis but is one of the great disablers. This ailment, an inflammation of the liver, may be caused by viruses. Serum hepatitis, transmitted by blood transfusion and by inadequately sterilized hypodermic needles, kills about ten per cent of those stricken. Infectious hepatitis, far more common, is much less dangerous, taking the life of approximately one patient in 500. It is spread by food and water contaminated by intestinal discharges of virus-carrying people.

Research into the cause of infectious hepatitis took a leap forward in 1944, when 350 of 572 campers at a children's camp in Pennsylvania fell ill. An old disease-detective trick was used: vegetable dyes were poured into lavatories. Soon drinking water showed up tinted, indicating that sewage was seeping into wells. The case was clinched when volunteers drank well water and then fell ill.

Regaining full health after an attack of this disease may take months. Treatment is essentially the same as for cirrhosis: no alcohol, bed rest and, most important of all, a diet rich in proteins and B vitamins. Researchers see in the not-too-distant future a vaccine to prevent infectious hepatitis. Dr. Joseph Boggs, of the Children's Memorial Hospital, Chicago, has found how to grow the virus of human hepatitis in a culture of human bone marrow. When sufficient quantities are available, it is likely that a vaccine will result.

For the great majority of us, our livers perform their tasks with such quiet efficiency that we are scarcely aware of their existence. Given a reasonable diet and a reasonable ration of B vitamins, most livers *will* take care of themselves—and us.

* From the Greek word meaning orange-yellow. That is the colour the usually red-brown liver assumes.

IN RUSSIAN hotels, says comedian Bob Hope, towels are marked "Ours" and "Don't You Forget It." —"The Bob Hope Moscow Show"



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Armchair Travelogue

Next door to the North Pole is a land of red snow, white coal—and Income Tax at four per cent

Spitsbergen: Oasis in the Arctic

By Gordon Gaskill





Spitsbergen is so far north it almost misses the map. By comparison, Iceland and Alaska are far down south. Even the Arctic Circle is about 700 miles south. And when people here watch the northern lights, they sometimes have to look *southward* to see them!

Everywhere else in the Arctic world, eternal ice and intolerable cold bar the way to all but the best-equipped polar expeditions. Spitsbergen is amazingly different, thanks to the Gulf Stream. Even after its 5,000-mile trip from Florida, the Gulf Stream holds



Longyearbyen, the capital of Spitsbergen in moonlight

enough warmth to melt open a summer pathway to Spitsbergen.

Called Svalbard by the Norwegians, "the land of cold coasts," Spitsbergen is an archipelago of five major islands and many minor ones. Until 1920, it belonged to nobody at all. Then, the First World War having pointed up its military value, it was offered by international agreement to Norway, which was the nearest nation, neutral and small. Spitsbergen, one-fifth the size of Norway itself, has a mere 3,500 inhabitants. All come from outside, and the vast majority (70 per cent) are not Norwegians but Russians. Both Norwegians and Russians come to dig coal that was formed from great forests that flourished here millions of years ago. Their four small mining communities are mere specks on the edge of a vast wilderness, much of it unexplored.

Everything about Spitsbergen is curious. It has "white coal mines" (white inside from ice crystals) and sometimes red snow, from strange algae that lie on top of it. Although the North Pole is next door (a mere 700 miles away), summer air temperatures occasionally climb into the

70's, and millions of tiny flowers bloom. But, Gulf Stream or no Gulf Stream, the ocean is still the Arctic. Calm fjord waters are especially cold, with a thin top layer (in summer) of just-melted glacial ice so fresh it can be drunk.

Blubbertown. Viking annals tell of the discovery of Spitsbergen in 1194. Its firm entrance into history came on June 17, 1596, when the Dutch explorer Willem Barents arrived and named it Spitsbergen, "the land of sharp peaks." For a century and a half thereafter, the adjacent waters were the scene of intensive whale and walrus hunting. In one sheltered bay I saw the remains of a strange Dutch settlement that existed more than 300 years ago, named Smeerenburg, or "Blubbertown."

Devoted to the killing and processing of whales, Smeerenburg had a summer population of more than 1,000—and none at all in winter. It was a wild, roaring camp town, with plenty of drink, gambling, quarrels and camp followers. But whales and walruses were killed in such prodigious numbers that they never recovered, and both are rare in these waters today. With the quarry gone, the hunters left, too.

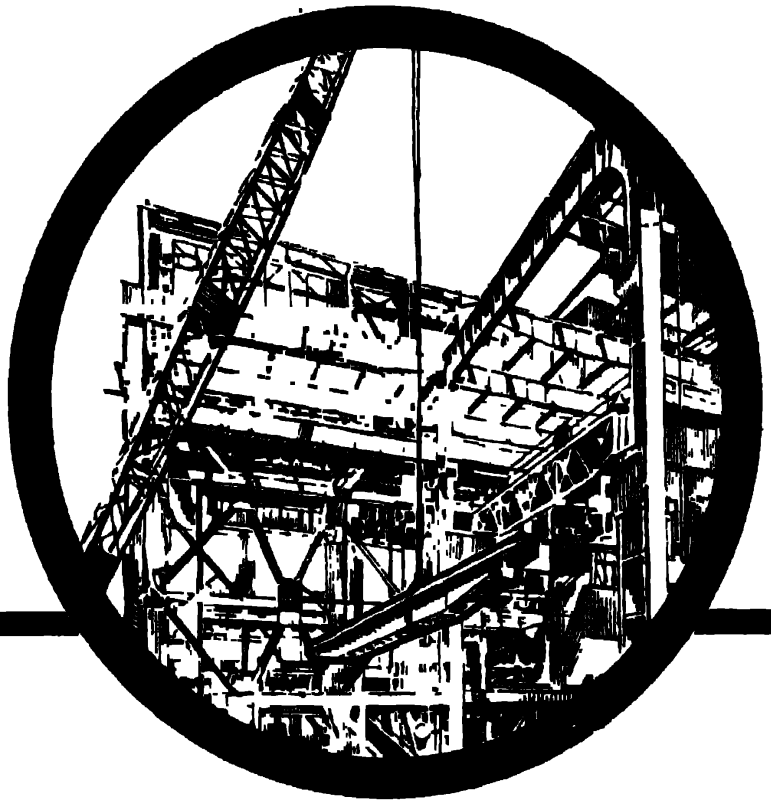
To scientists, Spitsbergen is an unspoiled paradise. Glaciologists are fascinated by the chance to study living, active glaciers. I went ashore on Cora Islet, an oddity because half of it, formed by a retreating glacier, is about 60 years old, the other half 300 to 400 million. Fossils are abundant. Palaeontologists tell of a kiaeraspis, a primitive fish that lived here more than 300 million years ago, so delicately fossilized that even its brain, eyes, nerves and minute blood vessels are almost perfectly preserved.

Botanists say that Spitsbergen is the richest of all Arctic countries in plant life—about 135 kinds have been found, some not even existing in Norway. Flowers are profuse and lovely, but tiny. Only two kinds of "trees" exist: one is the rare dwarf birch only eight inches high, the other a diminutive polar willow only two. Tourists are forbidden to uproot plants, not only to preserve things that grow so painfully and slowly but also to conserve the soil clinging to the roots. True fertile soil is so rare here that housewives import it in bags from Norway for their potted plants.

In the early part of this century, many explorers, trying to reach the North Pole, used Spitsbergen as a jumping-off spot. The publicity made people curious to see what Spitsbergen looked like, and it became a fashionable place to visit. In fact, far more tourists came then than now. One of these tourists, in 1901, was John Longyear, of Boston, who returned in 1906 to start operating the Arctic Coal Co., the first of any significance in the archipelago. (His name is immortalized in the tiny capital, Longyearbyen.) Subsequently, Dutch, Norwegians,

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British, Swedes and Russians tried coal mining here, but most gave up when prices fell in the late 1920's.

During the 1930's the Russians bought up many claims, and today they are the only non-Norwegians mining Spitsbergen coal. Soviet miners, often with their wives, sign up for a two-year term, enjoy such advantages as a heated swimming pool and huge greenhouses that produce fresh tomatoes, cucumbers and flowers. Despite all this, Norwegian productivity is about twice that of the Soviets, *per capita*. A Russian wryly admitted that a reproving cable had arrived not long ago from Moscow: PRODUCE MORE COAL AND FEWER BABIES.

Though Spitsbergen is Norwegian, it is Norwegian with a difference. The 1920 treaty gives to any citizen of any country that adhered to it (about 15 major nations did, including Britain and Russia) unusual privileges in Spitsbergen he could never have in Norway itself. He has the right to stake out mineral claims freely—and more than 93 per cent of Spitsbergen is not claimed yet. On anything he finds and exports, he pays a maximum royalty or tax of just one per cent. His income tax is a flat four per cent. He need pay no customs duty on anything he imports for his own use, whether machinery or cigarettes or Scotch whisky.

Coexistence. Oil? An old rule of-thumb says that where there's coal there might be oil, too. Some methane seepages have been found. And in 1960 the Caltex group sent a 20-man team to start a serious geological search for oil. A year later, the Russians jumped into the oil hunt; ultimately they had nearly 100 geologists and engineers prowling over Spitsbergen. The Russians have filed claims on some 70 concession sites, but the Norwegian Government has so far declined to grant licences for drilling—which the Russians are ready to begin this year. Should either group strike oil, the mere one-per-cent royalty would contrast sharply with the 50 per cent or more they would be required to pay in most other places.

A second treaty clause requires Norway to keep Spitsbergen permanently demilitarized. Norway has obeyed it, even though, shortly after the last war, Russia exerted pressure to get the two countries to fortify it "together." Russia complained bitterly when Norway joined NATO, arguing that this would mean NATO troops in Spitsbergen. Norway replied that no NATO forces would go to Spitsbergen. None have.

In all Spitsbergen matters, Norway goes out of her way not to provoke the Russians. In theory, all Russians on Spitsbergen are subject to Norwegian law; in practice, Norway tactfully doesn't press her rights. The Russians live entirely separated, by miles and mountains, and handle their own affairs.

Spitsbergen has no airstrips, since

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civilian strips could be used militarily. So tourists going there must take a ship. Twice each summer, the luxury ship *Meteor* takes 147 passengers from Bergen for a 12-day cruise to points in northern Norway and Spitsbergen. More go on *Lyngen*, an ageing, cramped vessel with an easygoing, friendly atmosphere. *Lyngen* makes the Spitsbergen run eight times a summer, and is in no hurry. Sometimes she stops to let passengers fish or take photographs, or to deliver long-awaited mail to a scientific expedition camping on some barren shore.

Lyngen calls at both Norwegian settlements — Longyearbyen, the larger of the two, and Ny-Aalesund, which is more interesting to tourists because it is 35 miles nearer the Pole and can thus boast it is the world's northernmost community. No one is allowed to leave the ship and stay in Spitsbergen unless he has an absolute guarantee of a room. No hotels of any kind exist. You can get off if you have full camping equipment and are willing to live in the open. All scientific expeditions do this—as did a Swedish honeymoon couple.

Long Winter Night. Once the midnight sun dips below the horizon (about August 23), the polar night marches on Spitsbergen with amazing speed. By about October 26 the sun is gone entirely, and never rises until mid-February.

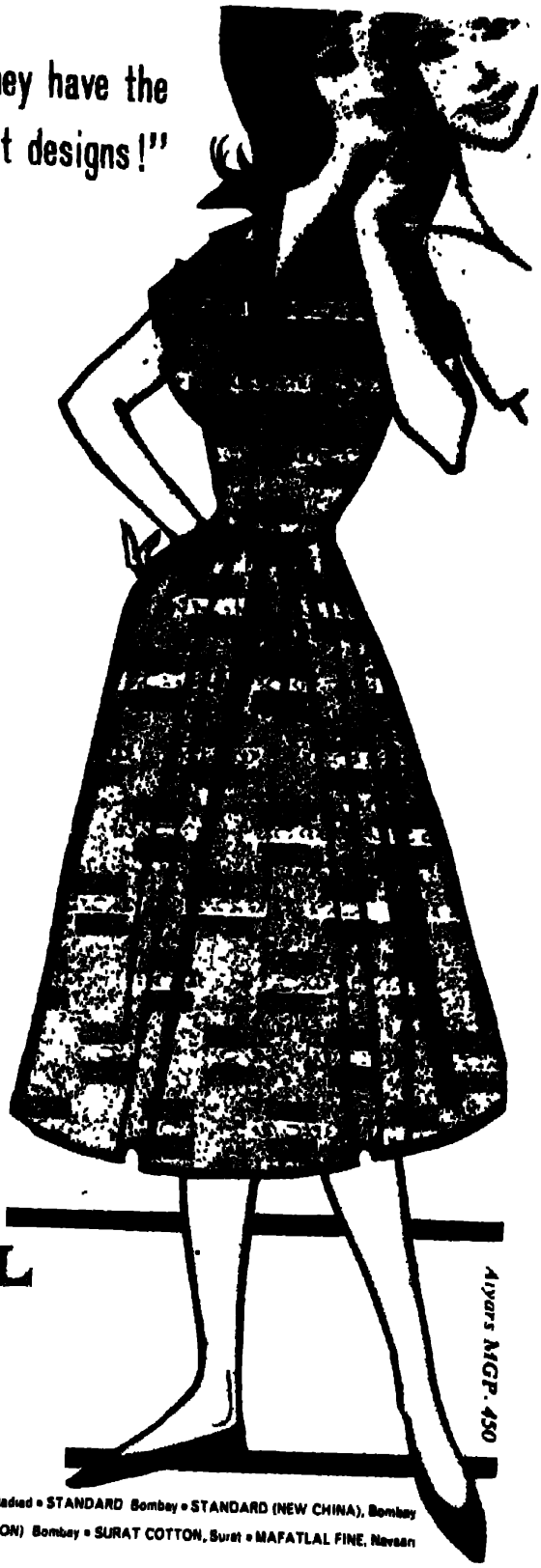
Fresh water is perhaps the worst winter problem. Until a few years ago, Longyearbyen depended entirely on blocks of ice sawn from a solidly frozen pond a mile away. Recently, the town put in a system to distil sea water, but the product is still so expensive that few buildings have it. All pipes used to transport water must be warmed by electric cable their entire length—otherwise, the water would freeze before reaching its destination.

An odd lethargy called "Spitsbergen fever" affects many in the long winter, especially single men or men separated from their families back in Norway. Men tend to lie listlessly in their beds in off-work hours, or to play poker for too-high stakes, or to drink too much.

This craving for drink was turned to good account a few years ago. Rats came to Spitsbergen in military ships during the war (when the Allies and Germans were vying for control of the island group in a little-known conflict), and soon became a menace. The coal companies cunningly offered to every man who killed a rat one whole bottle of spirits—later reduced to a half-bottle.

This touched off perhaps the most intensive rat hunt in history. Rumour has it that even the governor, unexpectedly short of drink for some official guests soon to arrive, once stayed up all night, shot four rats and collected enough spirits for his party. Today no rat has been seen for years, and the offer has been cancelled. A deaf ear has been

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turned to miners who claim plaintively that there are still lots of *mice* about.

Happy Hunting. About February 18, the sun peeps up over the horizon for a few brief minutes. Each day it appears longer and longer, until about April 19 it becomes the midnight sun again, never to set for another four months. To Spitsbergenites, April is by far the best of all months. The sun is bright and strong; the snow is wonderful for skiing. There are ski contests and chess matches with the Russians. The Norwegians nearly always win the former; the Russians *always* win the latter.

Hunting for polar bears, seals and geese attracts both professionals and amateurs to Spitsbergen. But some of the most fascinating "hunting" today is done by the Caltex helicopters. They often skim just above the ground, scanning country where no human being has ever set foot. Sometimes they find an unusually fine set of reindeer antlers, sometimes a big knot of soft musk-ox wool, which might be enough to make a rare scarf, even a sweater. Once they found the beautifully preserved skeleton of a huge musk ox, with the finest set of horns discovered to date.

Interesting as Spitsbergen is, it remains a hard and desolate place. Despite occasional wild talk, there is no proof of any great mineral wealth.

Except for the western side, favoured by the Gulf Stream, most of the archipelago lies under an eternal cap of ice and snow, sometimes more than 2,000 feet thick. Those who live here have special reasons; not many would choose to do so just for fun.

Selling Points

A BUSINESSMAN offered 250 shovels to the first coal-boiler owners who asked for them. The shovels were snapped up almost overnight. Now everybody who picks up one of the shovels to fill the boiler reads the inscription on the handle: "If you owned one of our oil-burners, you'd be upstairs now watching television instead of down here shovelling coal." —R. S.

A SIGN in the window of a shop in Rome's fashionable Via Condotti reads: "Our Dresses Advertised in Harp's Bazar." When I informed the owner that it should be "Harper's Bazaar," he smiled, nudged me and said, "My friend, that sign brings in business. Every day a dozen women come in to tell me about the mistake. And do you know what? About half of them end up buying one of my dresses." —Nino Lo Bello

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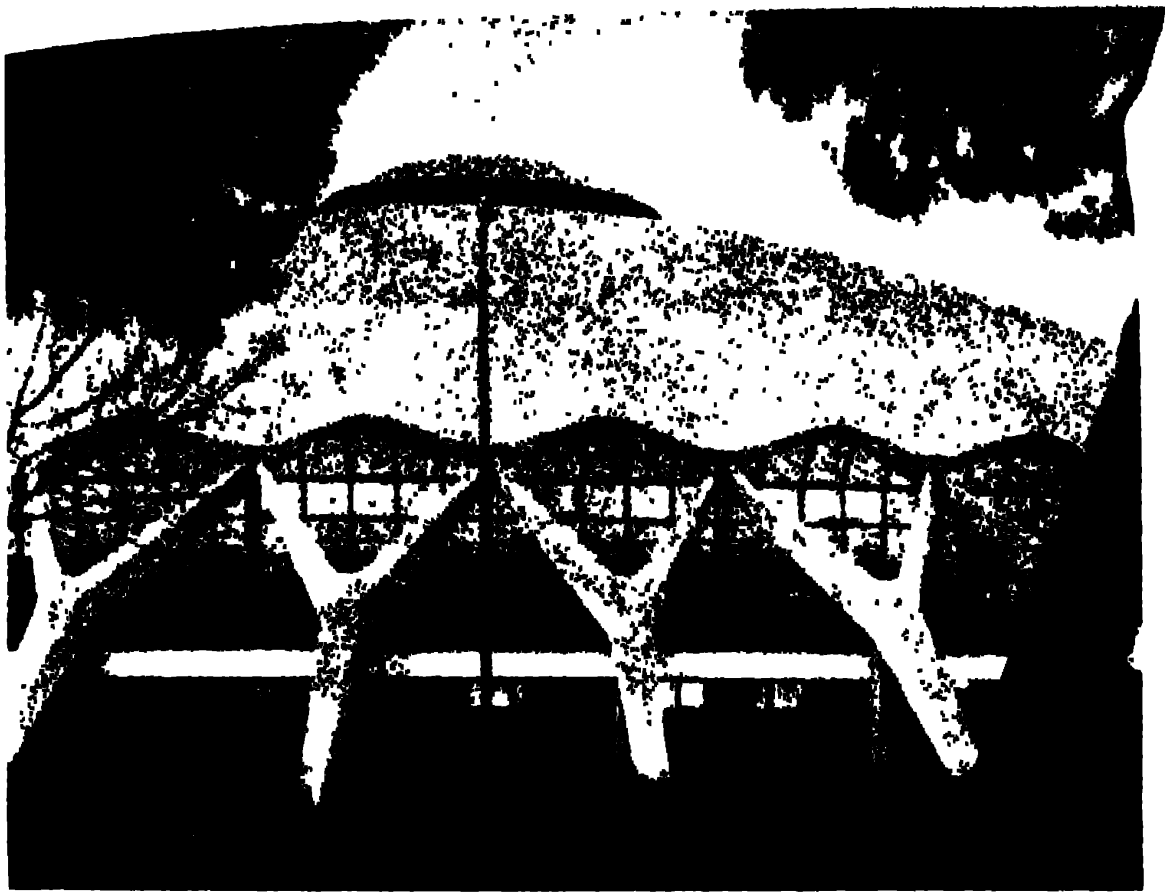
Concrete Triumphs of Italy's Master-Builder

By Ernest Hauser



Pier Luigi Nervi has created some of the most eye-catching structures of our time

On a January day in 1960, Pier Luigi Nervi, Italy's pioneer in structural concrete, took me to a hillock outside Rome, the site of his Olympic Sports Palace. The large circular structure was nearly finished. The "weightless" cupola, whose 315-foot diameter made it the largest concrete dome ever constructed, was safely up. The ceiling lights had been installed. Nervi had them turned on, and for a moment his eyes shone with more than reflected light. Standing on one of the top tiers of the circus that would seat 16,000 people, we seemed suspended in dim space. The dome, turned into a silver sunburst by myriad hidden lights, floated above us like a glorious sky spanning a dormant universe. Acclaimed as Europe's finest indoor sports building, the Palace stole the show at the 1960 Olympic Games. Three other Nervi structures enhanced the setting: the Little Sports Palace (designed with Annibale Vitellozzi) that hovers amid roses like a flying saucer; the open-air Flaminio Stadium, shaped like a mighty ship breasting the sea; and the majestic Corso Francia skyway



The Little Sports Palace, Rome

sweeping north to the Tiber The impact of these works turned the Olympics into an architectural exhibition. Nervi was the champion.

Nervi thinks of himself as no more than a builder. Nonetheless, world-famous French architect, Charles-Edouard Le Corbusier, who watched Nervi plan (with two other architects) the UNESCO headquarters in Paris, has this to say about him: "Seeing Nervi put a concrete skeleton into a structure is a magnificent experience. He never puts in anything that's gross. What elegance! He doesn't call himself an architect, but he's better than most of the rest of us."

As an originator, civil engineer and contractor, Nervi is that rare, all-round performer who can conceive a structure on paper and then build it—from the bottom up. His basic medium is reinforced concrete, and much of his genius has gone into creating vast interiors spanned by thin, shell-like roofs that seem to float without support. Besides the three sports arenas in Rome, his dazzling exhibition halls in Turin are landmarks for visiting architects and engineers. Now at the apex of his form, Nervi is busying himself with plans for twin skyscrapers for Montreal; an urban centre for The Hague; a church for

Ravenna, Italy; and a sports pavilion for Edinburgh University.

Swamped with new orders and bedecked with honours,* Nervi remains the simple craftsman he has always been. He has little social life, keeps his nose to the drawing board in a cramped office across the corridor from his Rome apartment. Three of his four sons work with him as architects or engineers.

Of medium height, lean, angular and sinewy, Nervi has about him the same air of neatness, elegance and toughness that characterizes his structures. He was born in 1891 in the Alpine town of Sondrio. A shy, introspective youth, he was all work and little play. He studied engineering at Bologna University. Graduating in 1913, he took a job as planner and calculator with a Bologna contracting firm specializing in the new technique of building with concrete. "They gave me far more freedom in planning," he recalls, "than I give *my* employees."

His talent caught the eye of a Rome contractor, Rudolfo Nebbiosi, who suggested in 1923 that they set up a construction firm together. Their first important building, designed and engineered by Nervi, was a Naples cinema, the Augusteo. "Its basement held a funicular station," Nervi told me, "and the thin, 100-foot-wide reinforced concrete ceiling supported an office floor. The whole thing passed quite unobserved, and as the structural parts were hidden by a lot of décor, no one could see just how it was built. But it was a really bold structure. I'd be proud to build one like it today."

The job that was to make Italians Nervi-conscious was a stadium built for the municipality of Florence, when Nervi was 38. Viewed today, this grandiose structure stands out as a signpost pointing to grander works to come. The fine, curving cantilever roof above the grandstand and the audacious profile of the spiral stairways presage the all-out splendour of Rome's Flaminio Stadium, which Pier Luigi, with his son Antonio, was to create years later.

Nervi's ingenious use of concrete was born of necessity. Italy is short of steel. Concrete, if well handled, makes a good substitute. Its plasticity allows the builder to give it any shape desired. Reinforced with steel rods, it becomes a monolithic artificial stone, far superior to natural stone because of its great tensile strength. Moreover, concrete is cheap, fireproof, easy to produce, and needs no upkeep.

Among Nervi's treasured possessions is the picture of an early motor-car whose engine is encased in an iron horse. "Whenever we discover new techniques," he says, "we often stupidly cling to old forms. A new material, such as concrete, creates its own forms. A

* Including a Gold Medal awarded him in 1960 by the Royal Institute of British Architects for his "outstanding services to architecture and structural engineering."



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structure is good architecture when it is correct."

Correctness is the basic plank of Nervi's credo. He insists that beauty is a mere by-product of structural "correctness," and stubbornly maintains that he never designs a line solely for its aesthetic value. There is, he reasons, a "correct" solution to every structural problem. As nature has come up with such ideal shapes as, say, the egg, so men can find perfection in design. They have come close to it, says Nervi, in the functional design of the jet plane. He has an almost mystical belief that all the perfect shapes exist already in some far corner of the universe. All the good builder has to do is pluck them from the clouds and translate them, with T-square and pen, into realities.

You'll never get there, Nervi says, by mathematics. At the School of Architecture of the University of Rome, where he held the chair of Technology and Structural Techniques until his retirement in 1961, he used to tell his students that their first design must be spontaneous, but should never overlook the basic requirements of the project. He himself is on somewhat distant terms with higher mathematics, and likes to enlist the help of experienced calculators in his office only after the "qualities and faults" of his project are clear in

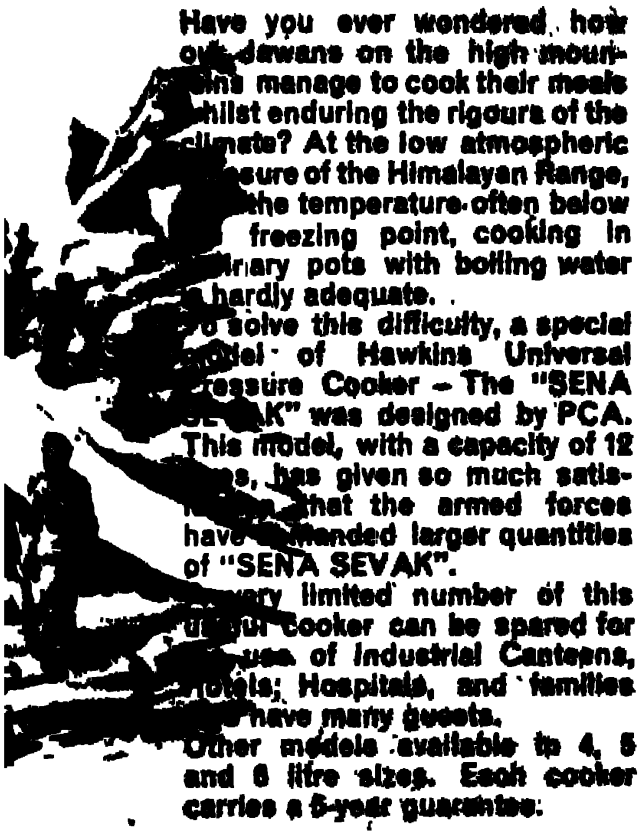


his own mind. Almost invariably, however, his approximate calculations prove correct.

One of Nervi's chief pre-war works was a series of all-concrete aircraft-hangars built for the Italian air force. Four of these thin-skinned, prefabricated hulks 330 feet long and 132 feet wide, were held up by six slanting pillars each. Placed on the outside of the structure, these flying buttresses supported the elegant lamella roof, leaving the vast interior clear of all obstructions. Nothing like these buildings had ever been attempted in concrete. During the war, the retreating Germans blew up the hangars. "Just one Allied sergeant getting there in time could have saved them," Nervi says.

His first big post-war order was the construction of an exhibition hall for Turin's annual motor show. Turin, its eye on the world market, wanted something special. Nervi obliged with a structure that surpassed in audacity anything he had yet constructed—a wavy, translucent barrel vault that seems to float on air. It almost literally does—for Nervi made it "weightless" by constructing it largely in precast sections of "iron-concrete" less than two inches thick.* This

* These lightweight slabs, a Nervi invention, are made by surrounding layers of fine steel mesh with cement mortar.



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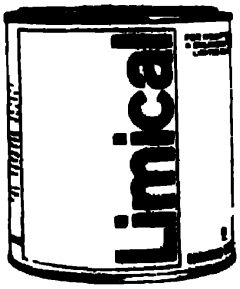
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soaring elegance is underscored by clean-cut, well-proportioned buttresses lined up along the walls and carrying their load without apparent effort. The whole 358-by-302-foot interior produces an impression of such simplicity and balance that the enormous room seems almost cosy. The hall was universally applauded as a miracle of engineering.

Nervi's most spectacular structure by him in 1936. While his main structural supports are poured in place, he likes to render portable whatever units of a nascent structure his cranes can lift. The mighty concrete ribs that form the cupola of his Olympic Sports Palace consist of six prefabricated sections each; cast on the building site, these sections were swung into place, then joined by their protruding steel rods. Thus, the dome



Palace of Labour, Turin

in Turin, however, is the Palace of Labour built for the 1961 centenary exhibition of Italian unity. Working partly in steel to save time, Nervi—who hates to repeat himself—produced something very different from his wide-open spaces: this hall is an imposing forest of 16 steel-and-concrete trees, each 66 feet high and spreading at the top into a flat, square canopy that forms an independent section of the roof.

The master-builder's favourite short cut, saving both time and money, is prefabrication, pioneered "built itself" in far less time and at much less cost than conventional methods would have required. The Flaminio Stadium, consisting of 6,500 prefabricated units—seats, roof beams, steps and so forth—was speed-built in 14 months. The Turin Exhibition Hall was started in September, finished in May. Of his recent works, the most impressive is a newly finished paper mill at Mantua, in northern Italy, whose 815-foot-long steel roof is suspended like a bridge from two towering concrete pylons.

The Nervi business is run today as a closed corporation owned by Nervi, his wife and their four sons. At eight-thirty every morning, Nervi turns up for work at his office. A hand-picked staff of about 20 architects, engineers and draughtsmen makes up the Rome team of the enterprise; several field engineers supervise projects on the spot. Structures outside Italy are built by local contractors to Nervi's specifications.

Nervi lives by the same old-fashioned principles that are the basis of his art. He is proud of being a self-made man, and considers work "the source of all good things." An almost puritanical austerity guides him in all his habits.

"You offer him an overstuffed chair," one of his sons explained, "and he will sit down on a hard chair. He's *morally* more comfortable that way."

Diplomatically Speaking

JOHN GALBRAITH, until recently U.S. Ambassador to India, said "After gaining ambassadorial status I found my answers became three times as extensive and twice as indistinct." —W. T.

"POPULARITY for an ambassador is like the olive in a martini," says retired American diplomat Ellis Briggs. "It is all right if you like olives, but it displaces some of the gin." —*Time*

"I DON'T think our relations with Canada are strained," Dean Acheson, former U.S. Secretary of State, said recently. "When I was a boy I had 102 or more cousins in Toronto. When I visited them in the summer, they'd beat me to a pulp. Now *those* were strained relations."

—*Notes, Quotes & Anecdotes*, Canada

Shavian Compliment

"I HOPE you have lost your good looks," George Bernard Shaw once wrote to Mrs. Patrick Campbell, "for whilst they last any fool can adore you, and the adoration of fools is bad for the soul. No, give me a ruined complexion and a lost figure and 16 chins and a farmyard of crow's feet and an obvious wig. Then you shall see me come out strong."

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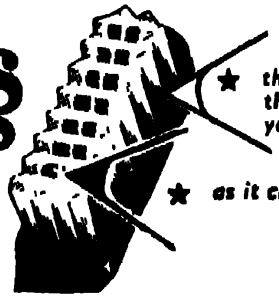
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On a route where the buses are few and far between, a little old lady got on the bus and handed the driver a ticket, complaining bitterly about the long wait. She had no sooner sat down than the driver turned and said, "Hey, this ticket's no good. It's dated yesterday."

"My goodness!" she exclaimed. "I didn't realize you were *that* late!"

—Contributed by Mildred Lingle

"Let's go over and cheer up poor Ellen."

"What's she sad about?"

"She has a complex and thinks everyone is trying to avoid her."

"Why doesn't she talk to her psychiatrist?"

"She can't seem to get an appointment with him." —F. R.

Passing through a military hospital during the war, a visitor saw a badly wounded Irish Guardsman. "When are you going to send that man home?" he enquired.

"He ain't going home; he's going up to the front again," an orderly informed him.

"Up to the front!" exclaimed the visitor. "The man is in terrible shape."

"Yes, sir. But he thinks he knows who done it." —*The Irish Digest*

"Wanted: Man to work on nuclear fissionable isotope molecular reactive counters and three-phase cyclotronic uranium photosynthesizers. No experience necessary." —*TMM*

In a steady stream of Sunday traffic, a small car stopped without warning. Screeching brakes testified to the alertness of drivers who narrowly averted a "chain accident." The driver of the car behind the offender jumped out and demanded an explanation.

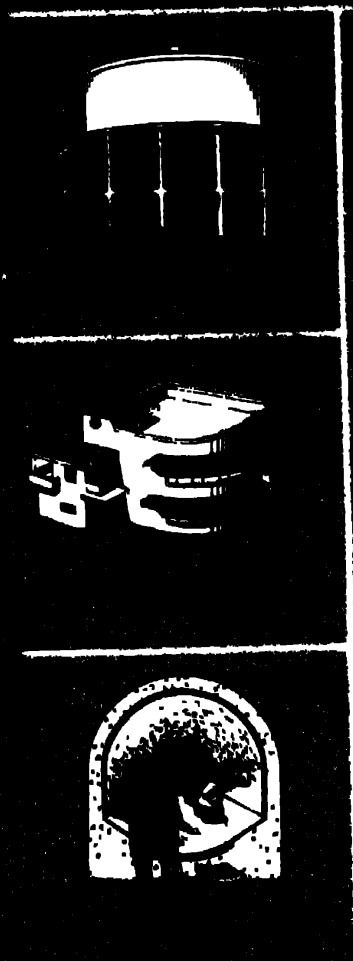
The offender was obviously taken by surprise. "We didn't mean to cause any trouble," he explained anxiously. "My wife and I were just trying out our safety belts." —Bennett Cerf

The son of a neighbour is having difficulty with Latin. At home his mother, who is well grounded in the classics, pesters and tutors him, and he doesn't like it much. At one frustrating point he cried, "Don't forget, Mother, Latin has changed a lot since you studied it!" —Jerome Beatty

A dress manufacturer, about to show his collection, sent his delivery boy to a restaurant noted for the variety and sumptuousness of its sandwiches, with instructions to buy ten different sandwiches. With 200 buyers expected, the youngster pointed out, ten sandwiches would not go far. He was told to follow instructions. When he came back, the boss looked over the samples and said, "Now take them down to the delicatessen and have them copied." —Bernard Roshco

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She's 13. She's often exasperating, but there are moments when she is the hope of the world.

To Claudia ~With Love

By Jessyca Russell Gaver

Before Claudia reached the teen-age stage, I couldn't believe the stories mothers told me of the unpredictable way their children changed their personalities from day to day, from moment to moment, during the years of 12, 13 and 14. Claudia is now 13, and in the past year her father and I have observed this metamorphosis at first-hand—usually to our utter consternation.

There are the reassuring moments, however, the quiet talks—generally at bedtime—when there are no barriers between us, no angers, no hurts.

During one of these sessions recently she brought up the subject of careers.

"Is there a chance I could learn Braille, Mummy?"

"Braille? Why?"

"Well, because last year in school I used to lead Tom around, that blind boy who had a Braille machine. You remember?" Her voice is soft with the wonder of the dream. "If I knew Braille, I could have written things for him and helped him in lots of ways."

I have to blink quickly and swallow a sudden lump in my throat. This is the glorious unpredictability of teenagers. This is the same 13-year-old Claudia who is always showing off in the senseless ways that delight comedians and cartoonists, and exasperate parents. This is the same Claudia who spends hours murmuring gibberish over the telephone, who reads books and magazines in a bubble bath, and emerges with unscrubbed arms, neck and ears that contrast eloquently with the clean body and legs that stayed beneath the suds. This gentle creature is the tyrant who screams that I'm trying to make her into a freak

Condensed from Parents' Magazine

if I insist on her wearing tights on a chilly day.

I suggest gently, "Well, I'm sure the Institute for the Blind or somebody would be glad to help you learn Braille on Saturdays. Are you thinking along those lines for a career?" I remember that our Claudia always mothers the youngest children in our neighbourhood and had announced one day that she wasn't getting married until I was ancient enough to stay at home and baby-sit for her, because she didn't want strangers taking care of *her* children.

Now she speaks slowly and seriously. "I want to do something to help children," she explains. "I love the little ones—you know that—and I want to help the ones who are ill and need to learn to do things for themselves . . ."

"You mean—rehabilitation work with crippled children?"

"Yes, something like that."

I sit beside her on the bed. She snuggles into my arms and falls into a light doze.

I remember the many cakes I have baked for her Sunday-school sales. I remember all the things we've done together, how she changed my life from a self-centred one into one of many interests, even when I didn't agree with her interests. I remember the neighbours who have stopped to tell me of Claudia's thoughtfulness and good manners. I think of how each week she wangles money from her father, even if it's just a small amount, to buy me some little thing, and how all her baby-sitting money last year went on Christmas gifts.

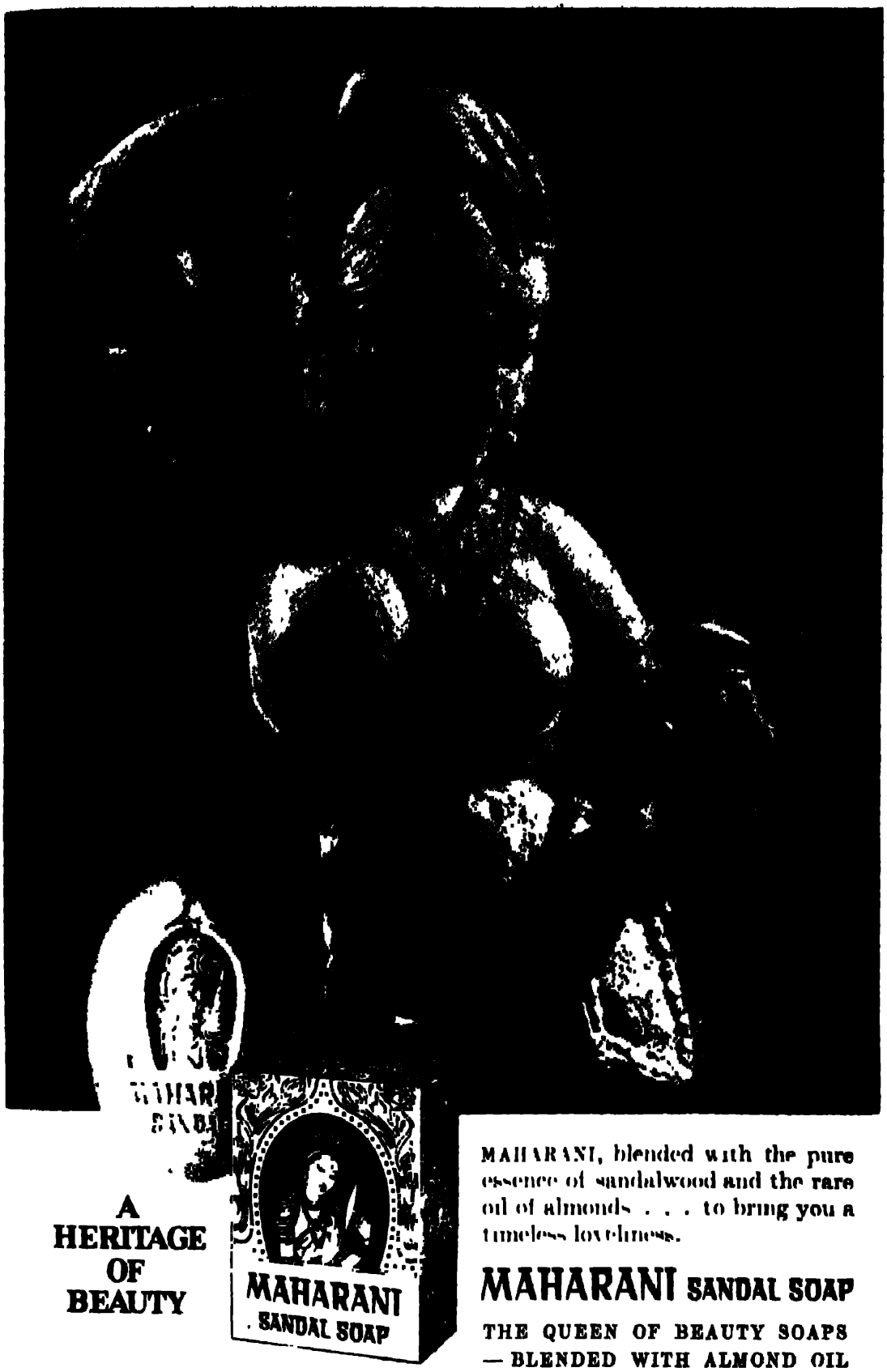
I remember how, when I am ill, she is the soul of consideration, which somehow makes up for the times, the many times, when I am well, that she becomes the world's shrewdest bargainer for privileges. And I remember all the golden moments of being close together like this, when nothing bad counts anymore, and when only the good remains valid.

I look down on my sleeping daughter. A bundle of teenage logic, teenage illogic, teenage tears, teenage laughter, teenage love. It is no secret any more, if it ever was, that adolescence is a trying period for all concerned. But it's a time of glory, too, as moments like this prove.

Icy Comment

THE ELDEST member of the local town-planning committee had quietly pointed out flaws in several ambitious schemes set forth by the Big Thinkers in the group. "Damn it, Ben," one said finally. "Do you have to throw cold water on everything?"

"Cold water," countered Ben, "naturally results when a lot of hot air gets on thin ice!" —*Supervision*



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Alberto Martén's Plan for Prosperity

In Costa Rica an enlightened economist helps workers to become investors with a stake in private enterprise

By Donald Stroetzel

Again and again over the past 14 years, a zealous Costa Rican lawyer-economist, 54-year-old Alberto Martén, has proved that *any* man, even the lowliest *peon*, can become a capitalist. Through Martén's ingenious plan, more than 5,000 workers in 80 Costa Rican companies have seen how capital of their own can work for them to bring security and possessions beyond their dreams. The idea is being discussed all over Latin America, and it has spread to Nicaragua, Guatemala and Panama. Plan Martén, as it is called, could be a powerful factor in helping underdeveloped countries to create a middle class—essential to a democratic society.

How does the plan work? The case of Rodrigo Marín is typical.

Marín, a salesman in San José's La

Condensed from Latin American Report

Gloria department store, allots five per cent of his pay each month to an investment association run by the store's employees. These monthly savings are matched, *colón* for *colón,* by La Gloria's owners to encourage that first vital step towards becoming a capitalist: thrift.

To put the savings to work, the association's board of directors—seven store employees elected by fellow workers—meets each week to decide among the various investment alternatives. These boards have done amazingly well over the years, have paid annual dividends averaging eight per cent of each worker's contribution. Like their counterparts in a big investment company, they achieve their results through carefully balanced portfolios: gilt-edge bonds, occasional common stocks, cautiously screened personal loans to employees.

Interest required on loans to employees is low by Costa Rican standards, usually six to eight per cent a year. (Many a worker uses his first Plan Martén loan to gain freedom from local loan sharks, who often charge four to five per cent a *month.*) Plan Martén also helps workers to buy cars and appliances without high-cost instalment payments.

For Rodrigo Marín, the loans and dividends provided the wherewithal to move from his mother-in-law's house to a cosy three-bedroom home of his own.

When I visited it with Martén one day recently, I saw his square-jawed face light with pride as he toured the all-electric kitchen, sat for a demonstration of the just-purchased television set. "I make not a single *colón* profit out of the plans, but to see this repays me a hundredfold in satisfaction," he said.

Costa Rica's employers, sceptical at first, warmed to Martén's idea when they saw the harmony it could bring in labour relations. To wealthy planter Manuel Jiménez de la Guardia, labour leader Daniel Quesada had always been a belligerent malcontent, "a boil in the neck." But when Quesada became president of the Plan Martén association for Jiménez's coffee and sugar workers, Jiménez began to see him in a new light.

The night he handed out the first 11,000 *colónes* in dividend cheques, "I realized how much he had changed," says Jiménez. "Some of the workers had never before received cheques in their own names, and they rushed to congratulate him for investing so wisely. All of a sudden, he was important and respected, smiling and happy. We get along much better now."

Adds Martén: "Of course they do. As two capitalists, they speak the same language."

Many employers, like Frank Jirik, of the Kativo chemical and paint company, insist that higher worker-output flows from the plan. "A worker puts more zest into his job,"

Jirik reasons, "if he can see that he is making financial progress."

Jirik's programme goes beyond Martén's basic plan: management puts up three times as much as each worker, with provision for reinvestment of dividends, so that capital will pyramid. Under the generous Kativo programme, an employee now earning 500 *colónes* a month from his job should, in 15 years, have an investment income averaging 750 *colónes* per month.

Few companies, Martén recognizes, can afford a plan like Kativo's. But even an equally matched five-per-cent saving suffices, as one sees up and down Central America, to spur thrift and investment in the humblest of workers.

What sets Plan Martén apart from other investment plans or credit unions is the way it meets Latin America's special needs. The plan encourages thrift among people who never saved before. It forms capital to make jobs. It helps to build a mass-consumption economy. And on top of all this, it takes the bite out of Communist attacks by making management and labour friendly partners, not antagonists.

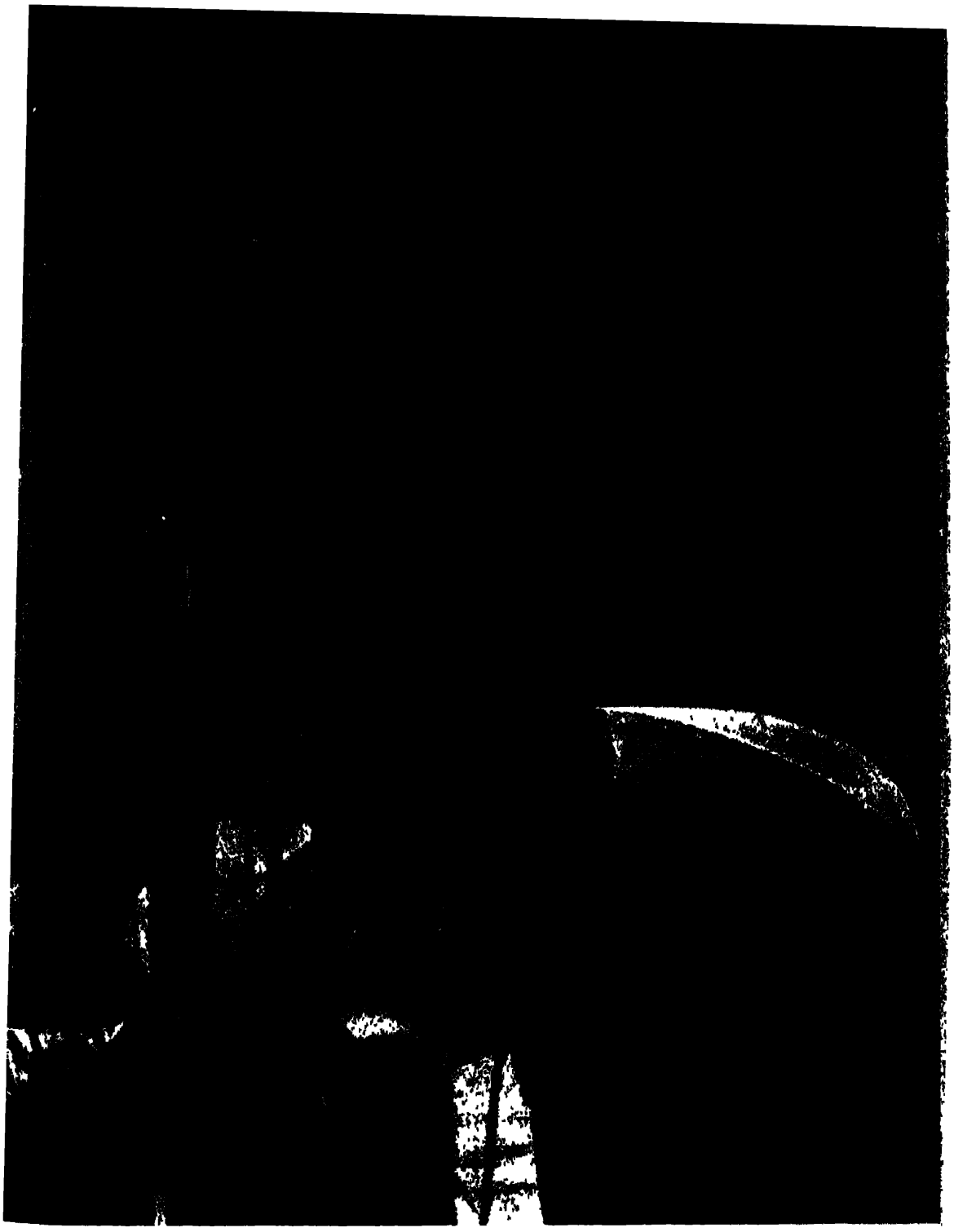
Plan Martén was born in 1949 of a desire to end the labour strife that had split Costa Rican employers and workers into warring factions—a situation ripe for Communist exploitation. Nowhere were conditions worse than at El Gallito chocolate factory, where malcontents often goaded manager Raul Odio into firing them so that they could collect the high severance pay required by a new law. Martén, then a professor at the University of Costa Rica, went to see Odio one day.

"This is absurd," he said to the manager. "You not only lose money; you lose trained employees. I have a plan. Use the money you reserve for severance pay to match what each employee saves. In that way, the worker gains more by staying with you than by baiting you to fire him." Plan Martén was born.

Today, 96 per cent of the chocolate factory's 320 workers participate in the plan. Says manager Odio, "When we learned to save together, we learned to live together. We now have a happy, confident atmosphere at the plant—no labour trouble for more than a dozen years."

Recently, El Gallito's grateful management raised the company's Plan Martén contribution: for every five *colónes* the worker saves, the company puts up 8·33 *colónes*.

With the success of El Gallito, Martén knew that he had found the mission in life he had long sought. Brought up mostly in France and the United States, son of a Costa Rican diplomat, the idealistic Martén had at one time studied for the priesthood, later turned to law. Outraged over election scandals in Costa Rica, he became a revolutionary, took to the mountains to join José Figueres's little band of guerrillas. But even after the revolution was won, eventually restoring



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free elections, Martén felt that his real mission had eluded him.

Now, in Plan Martén, he had something he could crusade for. At night and week-ends, he talked with employers and with worker groups. One by one, Costa Rica's employers bowed to Martén's eloquence. The Librería López, a bookshop, came in; then a haberdashery and a coffee plantation; later the fast-growing Numar margarine company.

As the number of Plan Martén companies grew, the worker-investors began to *think* like capitalists. "We came to realize why the boss must sometimes say 'No,'" I was told by Lotty de Fábrega, accountant at the Numar company. In a stormy two-hour meeting the night before, she and the eight other investment-association board members had debated a fellow worker's loan application, and eventually turned it down as a poor risk.

Employers are astounded that investment-association board members —workers who oil machines or stitch coffee bags by day—do so well as investors by night. Many a banker would envy the record at La Gloria department store: more than 900 Plan Martén loans over the past ten years—and not one bad debt! Most of the Plan Martén associations stick to employee loans and low-risk bonds. But this conservatism is changing as the worker boards gain confidence.

"Why not buy shares in companies?" is a question asked more and more. "There's a little more risk —but greater return and more inflation protection."

How much risk to take? Three years ago the workers at the Sánchez Cortés coffee company decided to buy a small tanning factory. The factory has already boosted its output from 25 hides a month to 65, its payroll from three workers to six. Members of the Plan Martén association work evenings and week-ends to guide the company's expansion. Half the profit goes to dividends, the rest back into the business for further expansion—another capitalist's lesson heeded.

"There is occasional risk in Plan Martén," its inventor admits, "just as there is risk in anything worth having. But for every Plan Martén association that has floundered, 20 have worked out well."

The Facts of Life

MY YOUNG son bounced in from school one day and asked, "Mummy, what is sex?"

I launched into a stammering, rather clinical dissertation on the facts of life. He looked more and more puzzled as I talked. Then he pulled out the identification card from his new wallet and said, "But, Mum, I'll never get all that stuff in this little space under 'Sex'!" —Mrs. W. B. V.

The exciting archaeological discovery that has unearthed the earliest history of the human race

ZINJ—THE MAN OF TWO MILLION YEARS AGO

By Francis and Katharine Drake



Dr. Leakey examining the skull of Zinjanthropus, reassembled from 400 fragments

One morning a few summers ago, dawn splashed into a dusty, ochre-coloured corner of the Serengeti Plain in Tanganyika and silhouetted against that wilderness a makeshift camp containing two white people—a sick man lying on a camp bed and a woman, boyishly slim in slacks.

Out in that sweltering, untamed hinterland, the couple—famous archaeologists Dr. Louis Leakey and his wife Mary—seemed hardly to have an enviable lot. For 30 years they had spent half their working lives on hands and knees exploring East Africa's fossil-rich, prehistoric lake beds for traces of the genesis of man, searching in the land which, more than 100 years before, naturalist Charles Darwin had guessed to be the birthplace of the human race.

Earlier, in Java and in China,

scientists had discovered evidence of ancient human creatures, notably the remains of a 300,000-year-old Stone Age hunter they called Peking Man.

But since this evidence indicated that these prehistoric beings were already sufficiently advanced to live in caves, use fire and make primitive weapons, it seemed unlikely that they typified the earliest humans. Moreover, excavations in Africa had turned up stone tools of an older culture than that in Asia, together with accumulations of small fossilized bones that seemed to have been systematically cracked apart for marrow. But so far the primitive man who had created these simple tools had eluded the archaeologists.

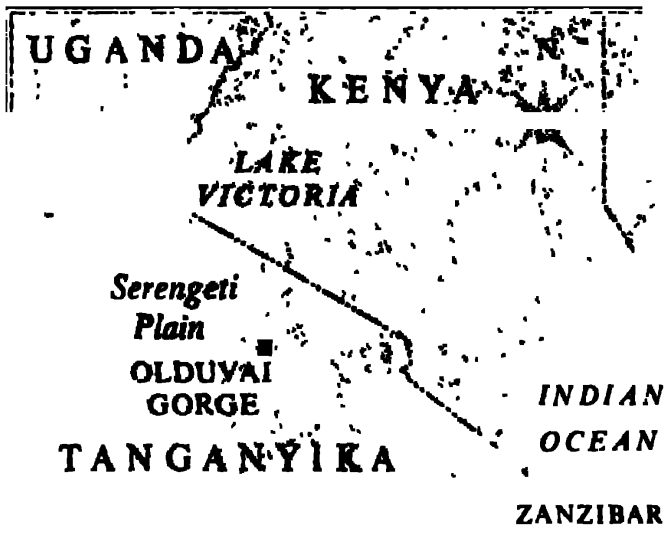
Leaving her husband in the care of an African helper, that Friday morning, July 17, 1959, Mary Leakey set off as usual for the site of their ceaseless exploration. Unarmed and escorted only by two Dalmatian dogs, she jolted their Land Rover down the rutted track towards Olduvai Gorge, a well-concealed, fossil-rich site two miles distant.

This barren, blistering-hot ravine is 30 miles long and 300 feet deep. Dust-devils pirouette inside it, temperature registers 110 degrees F. (43 degrees C.), shade is non-existent. Yet, archaeologically, Olduvai is unique. Nowhere else has nature exposed as clearly and in such neat, layer-cake formation the geological ages associated with man's prehistoric existence.

Parking her vehicle, Mary and the dogs jumped on to the rugged floor of the canyon, all three keeping a sharp look-out for Olduvai's inhospitable incumbents—lion, leopard, rhino, venomous snakes and



OLDUVAI GORGE



scorpions. She crossed the iron-hard lava floor and crawled 17 feet up to where yesterday's markers ended on the far side of Bed 1, the oldest and lowest of Olduvai's four strata, formed over a million years ago at a time when the area was a fertile lake shore and sabre-toothed tigers basked in its warmth. Grabbing her tools (a camel-hair brush and a steel dental pick, for fossils are too brittle for spade-and-fork shortcuts), she dropped to her knees and scanned the rock face.

Suddenly her heart turned a tumultuous somersault. Inches from her eyes, wedged in the rock face, was a fossilized-bone outline resembling the temporal section of a skull. Above it appeared two preposterously large teeth. Experience, training, every instinct advised her that these grisly objects belonged to a human skeleton.

How long Mary crouched before the momentous find she does not know; all she remembers is that the dogs, anxiously licking her cheeks, eventually broke the spell. She sprang to her feet and raced for the Land Rover and camp. Hearing shouts and barking, Dr. Leakey rose from his bed and the next moment was all but bowled over by the excited trio.

"Our Man! It's our Man!" Mary kept shouting. "I've got him. Hurry! Hurry!"

Almost before he could dress, Dr. Leakey, still dizzy from drugs, found himself whisked back to the gorge and tugged across to Bed 1. One glance at those colossal grey teeth was enough for Dr. Leakey. Not only were they human, but Bed 1's antiquity made it certain that they pre-dated Peking Man by several hundred thousand years.

The Leakeys put in three days of exquisite surgery with dental picks, 16 more days of sifting untold tons of scree (gravel) and arranging



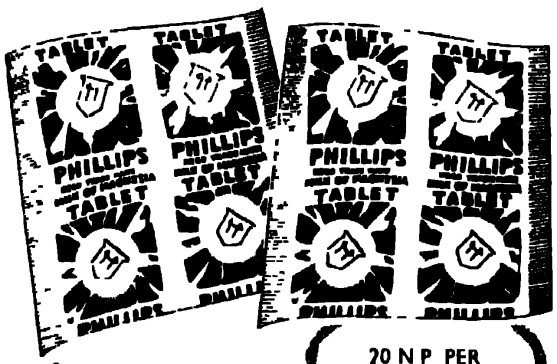
An artist's conception of Zinj

scores of tiny fragments before they knew that their haul consisted of a male skull complete except for the lower jaw.

The skull had been subjected to such pressures through the ages that it had cracked into more than 400 fragments. Fitting and pasting these fragile pieces together consumed nearly a year. One fellow archaeologist compared the task to reassembling an egg run over by a lorry.

The Leakeys christened their find

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Zinjanthropus (*Zinj* is Arabic for East Africa, *anthropus* Greek for man), which has since been shrunk to "Zinj" by archaeologists all over the world. When samples of the volcanic minerals surrounding Zinj were checked for age by the new potassium-argon dating process, he was found to have been in his rocky coffin for 1·75 million years—proof that Olduvai man had pursued his al fresco life beside that unremembered African lake nearly *one and a half million years* before Asia's Peking Man.

So different were Zinj's facial contours from those of modern man that, were he alive today, scrubbed, shaved, dressed and turned loose in a crowd, we should fall back aghast. Yet his face was not muzzled like an ape's. It was flattish and spade-shaped, and the skull's structure indicated that Zinj had an abnormally massive lower jaw. So abruptly does the forehead slope back that it seems squashed in, yet the braincase below is roomy enough (although less than half the size of ours) to have contained a sizeable amount of grey matter. Much of Zinj's face and body may have been obscured by shaggy hair; we do not know. Neither do we know his personal habits, but perhaps they differed little from those of the great beasts around him. Other clues enabled the Leakeys to establish that Zinj was not an ape, but a human being. The orifice through which the head was fastened to the spine reveals that,

unlike apes, he walked erect and carried his head high. His palate was almost as arched as ours, his 32 teeth were set in a jaw slightly rounded in front (an ape's is rectangular), and the small canines had no resemblance to fangs. Later in their excavations the Leakeys found two leg bones While it is not established that they belonged to Zinj himself, they show that early man was short and stocky, that his legs were straight and strong. Lacking any weapons against his enemies, he had only cunning to stay alive.

The evidence uncovered at Olduvai also gives us a bemusing picture of the huge beasts that everlastingly surrounded Zinj, extraordinary creatures long vanished from the earth. The fossil harvest has yielded the remains of more than 100 prehistoric titans. Olduvai's Bed 2, for instance, contained the remains of a pig as huge as a hippopotamus, with tusks so long that one scientist mistook them for an elephant's. Another was a giant sheep which measured six feet at the shoulder, with horns 15 feet across and as strong as a steel beam. Towering over the bird family was a tremendous ostrich, almost two storeys high, which must have laid eggs bigger than bowling balls.

But Zinj's greatest fear was starvation. The great beasts plundered the vegetation, narrowing down his diet to berries, nuts, roots, lizards, beetles, frogs, mice, whatever small

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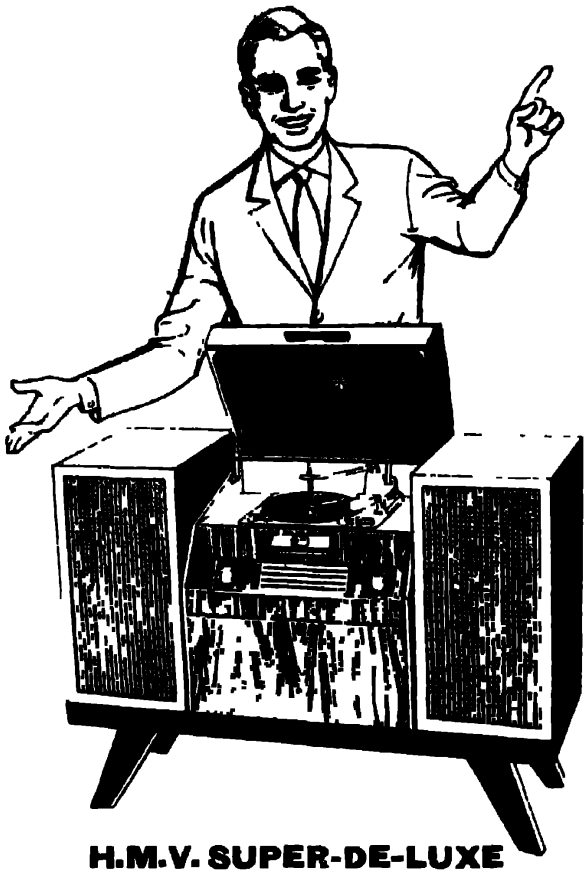
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HIS MASTER'S VOICE

His Master's Voice

creatures he could catch with his bare hands. How was it that Man, puny and defenceless, kept going while the omnipotent beasts vanished one by one? The Leakeys believe that hunger may have provided the answer. It was probably the all-powerful urge to eat that sparked off Zinj's sluggish grey matter into glowing life, setting fire to that miraculous flame—*imagination*—which no animal brain is capable of generating and which has blazed the path of human progress ever since.

Strangely, the clue pointing this way stemmed from the crude stone tools and the large number of cracked bones which the Leakeys found in Bed I, and from the teeth which had first riveted Mary Leakey's attention. The molars (teeth which grind and chew) were the largest ever found in a human skull, twice the width of ours, while the canines and incisors (teeth which tear and cut) were small. This argued that Zinj lived mainly off coarse vegetation. The marrow-bone leftovers suggested that vegetarianism stemmed from necessity rather than choice.

All at once those baffling stone tools, some crude enough to have passed for pebbles or cobblestones, began to make sense. They pointed to three conclusions: (1) the marrow bones were small because Zinj's blunt teeth were incapable of gnawing through the hides of larger animals; (2) marrow morsels, plus whatever Zinj could steal from predator "kills," had whetted his appetite for meat; (3) Zinj, by banging one stone against another, found that he was able to produce a jagged cutting edge sharper than his own teeth. Imagination prodded him into experimenting; soon he was sawing open pelts, helping himself to an unprecedented source of rich food.

Dr. Leakey's reconstruction of early tool-making has become justly famous. Years before he had transformed himself temporarily into primitive Man, roaming unarmed around the country. He was able to sneak up on a young Thomson's gazelle, leap on it and kill it with his hands. Using only his teeth, finger-nails and muscles, he found he could neither gnaw through the hide to expose the meat nor, exerting top strength, dismember the carcass. Next he collected stones, smashing them together in the way he imagined early man must have made his tools. He soon contrived to duplicate a prehistoric chopper, round at the butt for palm-fitting, chipped to an edge at the tips or sides to function as a saw, axe, knife, cleaver or scraper. Armed with this, he took only 20 minutes to slash open the beast, skin and dismember it.

Here at last was evidence that could account for Man's survival. At that crucial time nearly two million years ago when the embryonic human mind clicked fast enough to

pull off a comparable experiment, Man's ultimate mastery over beast and environment was assured. From then on nothing could obliterate the human race—except the human race itself.

Although Zinj's skull divulges some of time's best-kept secrets, it cannot pinpoint just where in the human story near-man became true man. Scientists agree that the first life forms appeared on earth almost 2,000 million years ago, but since evolution transforms one species into another with immense deliberation it remains indeterminable when the human root-stock forked in two, one branch heading towards Man, the other to the apes. Man evolved bit by bit; millions of years rolled by before the human branch produced a creature like Zinj, who made tools in a systematic manner.

Since the Leakeys discovered Zinj, Olduvai Gorge has become world-renowned. Backed by the National Geographic Society and with the help of trained assistants, the Leakeys can now explore more of the drama-packed terrain in one year than in all the previous years put together.

While excavating Zinj the Leakeys unearthed what appears to have been a contemporaneous lake-shore living area, 50 feet by 70 feet, the whole space strewn with choppers and small stone hammers. The campsite offers no evidence of burning or charring, so it is unlikely that Zinj used fire. Evidence indicates that it required a million and a half years more for Man to advance to the use of fire, another quarter of a million to invent bows and arrows, nearly 50,000 to move on to firearms, three more centuries to achieve Big Berthas. Today, less than 50 years later, his accelerating imagination has lifted him to the periphery of space and given him the power to destroy his world.

Some feel that the great Leakey discovery is unmatched for timeliness—that Zinj with his squashed-in head and spade-shaped face lies etched against his ancient background not simply as a relic but as a symbol.

At a time when human destiny has never seemed more clouded, it reminds Man that his spirit has remained unconquerable throughout the ages, equal to each successive danger, and that as far back as the story goes, nearly two million years, he walked erect and carried his head high.

Bon Voyage

AFTER buying and posting home an insurance policy before a plane trip, I stepped on a near-by weighing machine. Out came one of those fortune-telling cards. The cheery message read: A RECENT INVESTMENT MAY PAY BIG DIVIDENDS. —J. V. N.

BOOK OF THE MONTH

My Darling Clementine



The Story of Lady Churchill

✦

from the book by

JACK FISHMAN



"SHE HAS BEEN the companion and prop of all my life," Winston Churchill has said of his wife. "I could never have succeeded without her."

Yet at the time of their marriage the gossip in London society was: "It will never work out." One acquaintance went so far as to forecast: "The union will last about six months, with luck. Their marriage will fail because Winston is not the marrying kind."

He certainly did not seem to be. One of the most eligible bachelors in Britain, he had spent years successfully fighting a defensive action against society mothers with marriageable daughters. He was not oblivious to the charms of beautiful

Lady Churchill, a woman of beauty, character and charm, has dedicated herself for over 55 years to the man of destiny she married. This is the story of her eminently successful partnership with one of the most turbulent and colourful personalities of the era. "Being married to him couldn't be easy," she admitted. The truth of this is shown in the intimate domestic glimpses behind the political scenes and dramatic events of two world wars.

"My most brilliant achievement was my ability to persuade my wife to marry me," Sir Winston has said. How different might have been his career, and the history of the world, if she had chosen otherwise!

young ladies; he was just too busy with his political career. President of the Board of Trade and a Cabinet Minister at the age of 33, he was a young man in a hurry.

Clementine Hozier changed all that.

Winston was introduced to her at a dinner party in the London home of Clementine's great-aunt in the spring of 1908. He promptly fell in love with this modest but spirited girl.

After the ladies had withdrawn from the dinner table, friends observed that Winston, for the first time in his life, was plainly anxious to leave the port-and-men-only conversation to rejoin the ladies as swiftly as possible.

Everyone there knew 23-year-old Clementine well. Society magazines

had praised her Grecian beauty, her large grey eyes. Born to an aristocratic but poor family, she had been living in France with her mother, three sisters and brother.

When the family moved back to London after she completed her education, Clementine contributed to its income by teaching French—for which Winston respected her all the more.

Winston became a regular caller at the Hoziers' small Kensington house that summer, courting Clementine and making sure that everyone knew it. In "Clemmie," as he called her from almost their moment of meeting, he felt he had found his ideal.

He asked his cousin, the Duke of Marlborough, to invite Lady Blanche Hozier and her daughter to the ancestral Churchill home, Blenheim Palace. One day in August he strolled with Clementine across the estate to Diana's Temple, a stone pavilion set among yew trees by a lake. There he proposed, and she accepted.

A few days later Clementine wrote to her aunt: "I cannot describe my happiness to you. I cared for him very much when he asked me to marry him, but every day

The 1908 engagement photograph of the Right Hon. Winston Churchill, M.P., and Miss Clementine Hozier, daughter of Colonel Sir Henry Hozier



since has been more heavenly. September 12 has been settled for our wedding."

The occasion was like a royal wedding. When the bride and groom left St. Margaret's, Westminster, the police couldn't hold back the crowds, and hundreds broke through, surrounding the car, cheering and shouting congratulations. At the reception, Clementine found rose petals strewn before her and Winston.

They began their honeymoon at Blenheim Palace, then travelled to Italy and Austria. "When we visited Venice," Clementine told a friend later, "I wanted to ride in a gondola; he insisted on a motor launch —said it was far more healthy; the fumes killed germs, and so on. So we rode in a motor launch! There is not much romance in Winnie."

But years later, Churchill himself wrote a fitting summary of what the marriage meant to him. His book *My Early Life* ends with the words ". . . until September 1908, when I married and lived happily ever afterwards."

"Being Married to Him Couldn't Be Easy"

A FEW MONTHS after the Churchills set up home in Westminster, Clementine told Winston she was expecting their first child. He fussed and treated her like a fragile piece of porcelain, and Clementine laughed.

When their daughter Diana was born, Lloyd George asked Churchill, "Is she a pretty child?" It was a fair question: Clementine was one of the reigning beauties of the day; but Winston, despite his blazing red hair, equally blazing blue eyes, and electric personality, was not considered handsome.

Churchill beamed. "The prettiest child ever seen."

"Like her mother, I suppose," remarked Lloyd George.

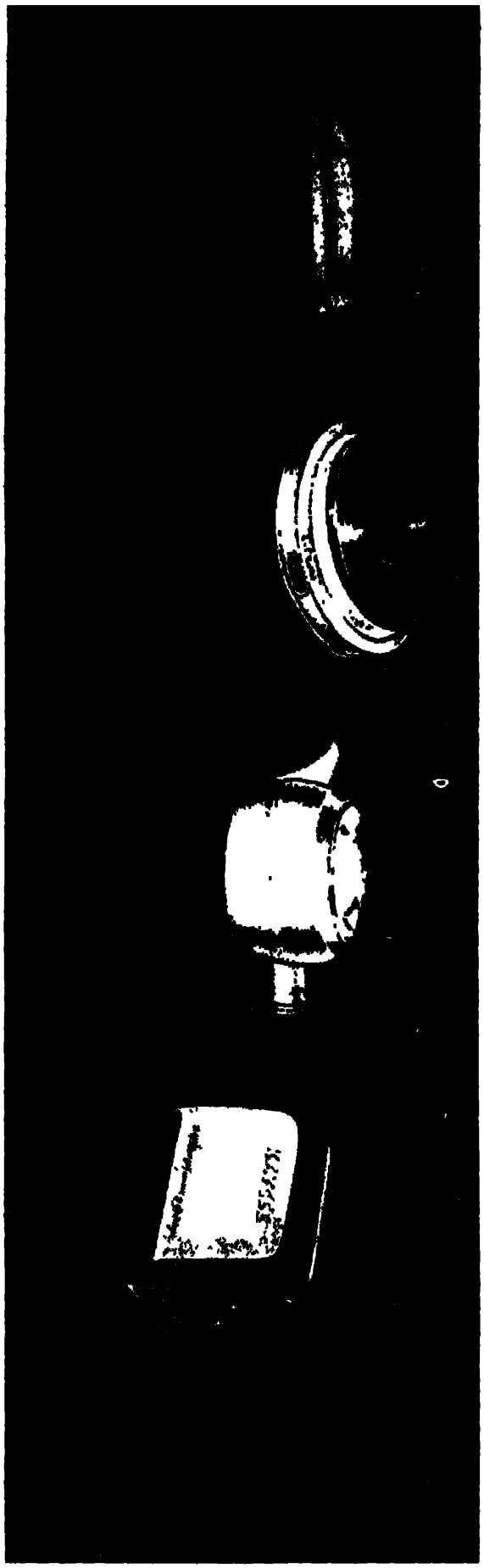
"No," Winston answered solemnly. "She is the image of me!"

Their domestic happiness was plain for all to see, and many who had previously disapproved of the match began to feel that it might, after all, prove to be a good marriage.

Though the Churchills moved in exclusive social circles, they were poor by the financial standards of the day. Winston had to work hard as a journalist and author to pay the household bills. "But," he told an acquaintance, "it is well worth it if you live with someone you love."

Clementine admitted to friends, "Being married to him couldn't be easy." It certainly wasn't. Careless in personal matters, brooding and zestful by turns, sleeping by day and working through the night, Churchill was a handful for any woman. But the dedication of her own powers to his well-being became Clementine's contribution to her husband's greatness.

She would share his mood when, with tears running down his cheeks,



he would declaim from a newly written speech some passage dwelling on an incident of pathos or disaster. She would laugh at his touches of wit or nod in endorsement of his carefully prepared points. For, to perfect his speeches, he rehearsed them with Clementine, taking careful note of her shrewdly constructive comments. She told him frankly that many of his early speeches were too impetuous, overelaborate, frequently harsh and strident. And she helped him to overcome a speech impediment that often reduced his words to a painful stammer. He would look to Clementine, seated in the gallery of the House, for silent, smiling encouragement as he fought to make his points with clarity and effect, often in the face of sadistic mimicry of his stammer by cruel young M.P.'s.

Then, during the First World War, came the disaster of the Dardanelles, a daring campaign which Winston had conceived as First Lord of the Admiralty. Military command bungled the enterprise, but Churchill got the blame and was forced to resign.

His friend Lord Ismay said, "The Dardanelles operation, if properly supported, would have shortened the war by two years. But Churchill was dismissed, and he felt his life was broken. The experience had the most tremendous impact on him. I think it must have been, above all, the belief of his wife in

him that was his rock during that terrible time."

Chafing for action and danger, Churchill left home to fight at the front in France. But friends in Parliament pressed him to return to Westminster, where he could be of far greater service to his country. Clementine agreed, and eventually Winston was persuaded to come back. By 1917 he was once more in the Government as Minister of Munitions, and the Churchills' house became Winston's second war headquarters, bearing only the remotest resemblance to a home. Dispatch boxes, telephones, and secretaries pounding typewriters were everywhere, and Clementine and the domestic staff had their work cut out keeping the children —now there were three—out of the way.

Then on the morning of November 11, 1918, Winston looked out of an Admiralty window and listened as Big Ben boomed eleven—the Armistice had been signed and the war was over. Later, Clementine, radiant, excited, ran in to join her husband. Together they left the building and drove through the cheering crowds to see the Prime Minister, Lloyd George. Now that the fighting was over, public gratitude seemed reserved exclusively for the Prime Minister, and Winston and Clementine faded into the political shadows. But not for long.

The fortunes of politics continued to play havoc with their married



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life. Few who now honour the name Winston Churchill realize how intensely that name was once hated. And Clementine shared the opprobrium, and at times the danger, which this hatred entailed.

Winston was appointed Colonial Secretary in 1921 and, during an inspection tour in Egypt, Clementine was sitting beside him when a mob of fanatical nationalists attacked their train, screaming abuse and throwing stones at the carriage windows. In Alexandria she drove with him in an open touring car, impeccably dressed, evidencing no fear of the menacing, yelling crowds that lined their route.

On their return from this trip a new threat arose. Members of Sinn Fein, the Irish revolutionary organization, assassinated a Member of Parliament who had spoken out strongly against the group. Clementine realized that Winston, then responsible for the conduct of Irish affairs, could be the next target. There was danger to herself and the children as well, for Sinn Feiners might kidnap one of them as a weapon against Winston.

During the following weeks, until the danger subsided, their home was guarded like a fortress. Every room was searched by detectives for bombs and lurking gunmen. When the back of Winston's favourite bedroom chair was bullet-proofed with a steel plate, Clementine added a feminine touch by covering the plate with tapestry. She never showed fear, nor did she ever try to stop Winston taking risks. Instead she quietly saw that every possible precaution was taken for his safety.

And she became as familiar with personal affront as she was with physical danger. Her first public trial came during the 1922 general election. A postwar reaction against the incumbent government had set in, threatening Churchill's hold on his Dundee seat in Parliament. Then, three days before the opening of the campaign, Winston was forced to undergo an emergency operation for appendicitis, and Clementine had to bear the weight of active electioneering.

When she arrived to open the campaign at the Larch Street Hall in Dundee, she was greeted by hoots and jeers. A supply of "electric snuff" was released in the crowded, stuffy hall, and everyone on the platform suffered fits of sneezing. Mastering the urge to sneeze, Clementine rose to speak.

"I'm glad to see that you are all alive and kicking in Dundee!" she began. But hecklers interrupted her immediately. She stood calmly, waiting until order was restored. "I only wish," she went on, "that my husband had not been prevented by his illness——"

"Oh!—Is he ill?" a voice interrupted sarcastically.

"He has been very ill. I don't think it is very sporting of you to ask such a question. My husband

has had the honour of representing this city for 14 years."

"Fourteen years too long!" someone called out.

A barrage of incoherent questions followed. Clementine answered them as best as she could, her voice ringing through the hall, and finally she departed the undoubted victor.

Two nights later she faced an audience of 4,000. Despite vitriolic taunts from a group of self-proclaimed Communists, she delivered her speech and answered questions effectively. Next morning the Glasgow *Herald* reported, "Although she has not encountered smooth water, Mrs. Churchill has proved herself a 'bonny fechter' [good fighter] on behalf of her husband. Facing an enormous audience, she got the best hearing of all the speakers, mainly as the result of admirable tact and determination."

The Chancellor of the Exchequer leaves No. 11 Downing Street on April 28, 1925, to present his Budget to Parliament



Churchill was able to join the campaign two days before polling day, but the tide of popular feeling was irreversible. He lost the Dundee seat, and was out of Parliament for the first time since 1900.

"A Queen Among Wives"

ONE MORNING after the election, as the Churchills were driving past the Houses of Parliament, Winston said, "It's difficult, after one has been nearly a quarter of a century in that place, to know that one has no longer any right there."

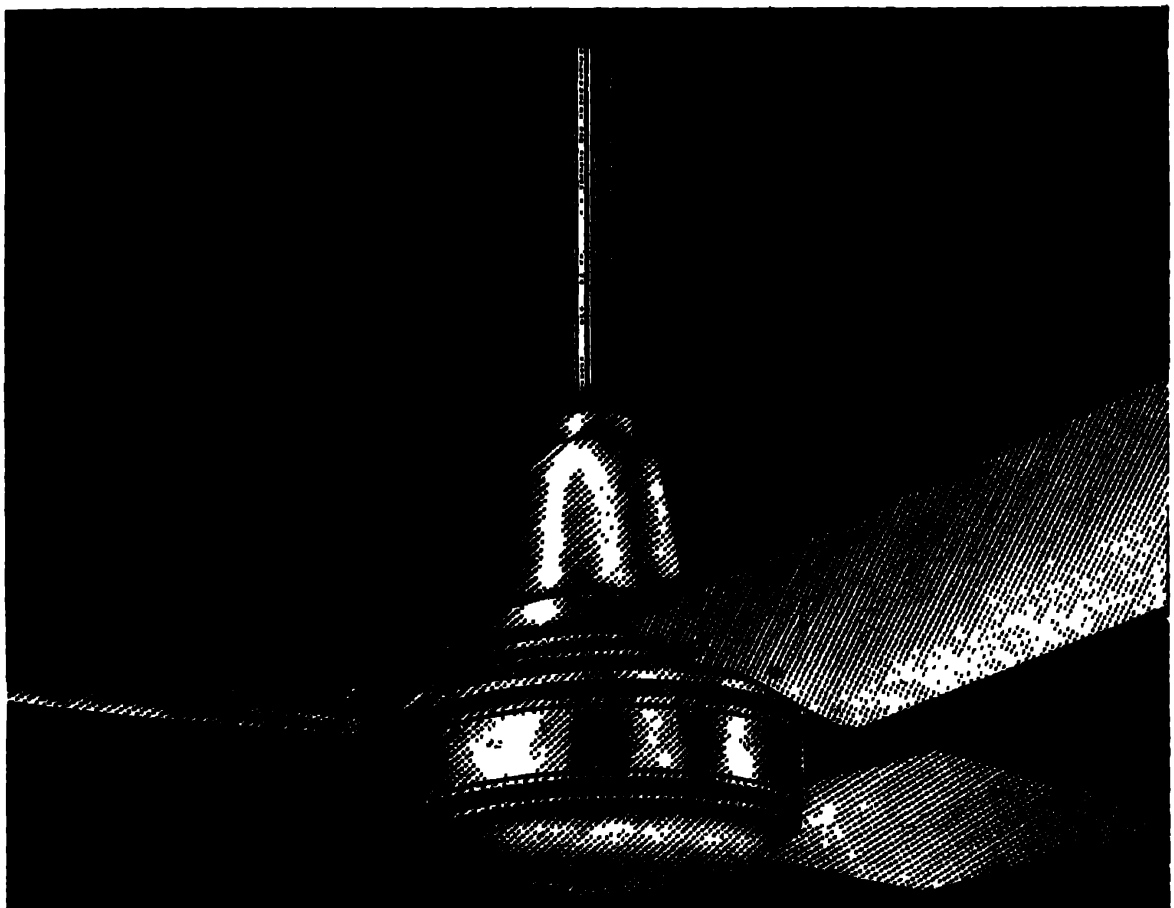
"The opportunity will come," she answered.

It came in 1924. Winston was not only re-elected to Parliament (from Epping, in Essex)—he was appointed Chancellor of the Exchequer. As hostess of No. 11 Downing Street, the official residence of the Chancellor, Clementine found new scope for her remarkable personality. Her touches introduced a new warmth into the usually formal, cold rooms of the house. She made it a home.

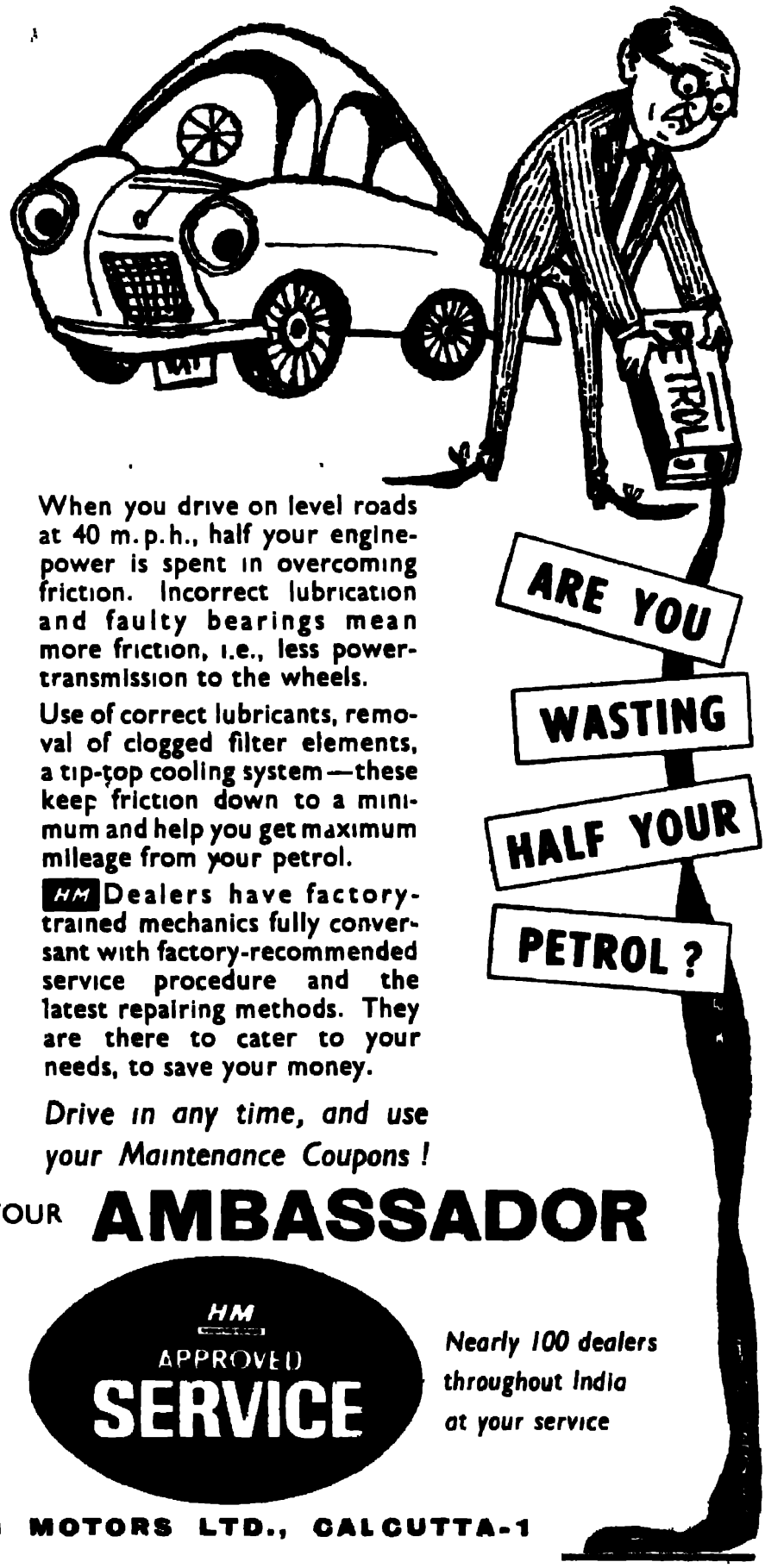
Under her skilful hand, both No. 11, and Chartwell Manor, the Churchills' country home in Kent, became social centres for visitors from all over the world. Winston loved entertaining, and during

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meals he and Clementine often openly revealed their enchantment with each other by exchanging gentle smiles. Clementine's subtle influence was obvious to every guest —this "queen among wives" (as the late Lord Riddell called her) was always ready to take over when one of Winston's unpredictable moods threatened to turn the table talk into disaster.

She could be as effective a diplomat when she was a guest. At one dinner party, the hostess confided to Clementine with some embarrassment that a distinguished foreign potentate had been seen purloining a little silver salver. It was one of an antique set, and irreplaceable. What was she to do?

Clementine thought for a few moments, then quietly suggested a plan to Winston. With an impish smile, he also appropriated a salver under cover of his table napkin. Then, sidling up to the potentate and slyly revealing the salver sticking out of his pocket, he whispered, "I've got one, as well as you. But we'll have to put them back, you know. We've been spotted!" Both men duly replaced the salvers.

More than one Minister's wife has sought to gain the reputation of being the power behind the throne. Clementine never chose this course. Instead, the art of not being overshadowed, yet never stealing the limelight, became one of her special achievements.

During a speech at a girls' school, she once offered this advice: "If you find yourself in competition with men, never become aggressive in your rivalry. She who forces her point may well lose her advantage. You will gain far more by quietly holding to your convictions."

Her self-appointed task was to bring a sense of order into the abnormal home life of her husband. She fashioned a rule of living for both of them—a pattern of making the best use of time, wisely allowing sufficient flexibility for the unexpected. But, above all, she considered Winston's moods and creature comforts, especially his love of good food.

Once she was asked, "Who is the most important person in your life?"

"The cook, of course," she replied.

In all, as one dinner guest stated, "There are few more flattering experiences than to be one of Clementine Churchill's guests—not because she is Winston's wife, but because she has the quality of being able to get the best out of anyone."

Under the Shadow

BY THE END of the decade the cold wind of change was beginning to blow against Churchill's party once again. In 1929 the Conservative Government was swept out of office and, though Winston retained his seat in Parliament, his popularity was at its lowest ebb for years.

Clementine knew that Winston lived for the day when he could

once more assume power and authority. But during the mid-1930's he was a lone wolf, a voice in the desert. His constant warnings of the menace of Hitlerism were dismissed by a public which preferred comfortable words. "Let him write history," they said. "It is too dangerous to allow him to make it."

During these years Clementine fought ceaselessly to sweeten the bitterness of political exile, and Winston bore the hostility and the sneers with a fortitude strengthened by her absolute faith in his future. When his hopes floundered she fostered them, and when he was desolate she mothered him.

In 1930, during the period of Churchill's "political exile," he and his wife attend the funeral of statesman Lord Balfour



As 1938 passed, Clementine and the entire family lived in the constant shadow of his fears for the nation's security. To guests who came to their home both of them talked of little else, for nothing else mattered.

At Chartwell, Clementine entertained international journalists, and travellers for British firms—men who could supply Winston with information he needed in his preparation for the war he now felt was inevitable. But his words of warning were even less welcome when the world, delirious with relief, welcomed Neville Chamberlain back from Munich with his "peace in our time" paper promise from Hitler.

Then, swiftly, the tide turned. Hitler's armies goose-stepped into Czechoslovakia, ripping the blinkers from the eyes of the freedom-loving peoples of the world. The country turned to the one voice that had been unafraid to say in the past what the future would be. Jeers turned to cheers.

On the evening of Friday, September 1, 1939, Clementine joined ambassadors and peers in the Distinguished Strangers' Gallery of the House of Commons. Germany had attacked Poland, and mobilization of British Forces had been ordered. More than anyone else, Clementine knew that her husband's whole life had been a preparation for this moment. She saw him sit in silence, overcome by the disaster he had foreseen so long, his face lined with grief.

By 11 o'clock on Sunday morning, the country was at war. Sirens wailed, and lorries full of soldiers

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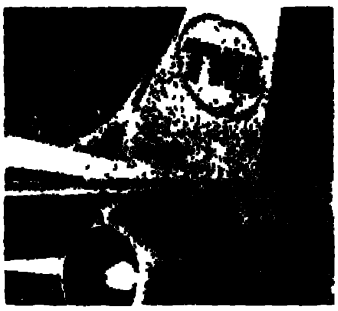
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and arms sped through the streets. That afternoon a call came for Winston at his daughter Sarah's flat, where he and Clementine were lunching with several other members of the family.

Everyone instinctively felt that this was no ordinary telephone call, and Churchill chose to answer it alone in the bedroom.

When he reappeared, Clementine said quietly, "Tell me."

Looking straight at her, with tears in his eyes, he said, "They have given me a job again—I am First Lord of the Admiralty."

"What will you do?" Sarah asked.

"What am I going to do? I'm off to the Admiralty. The *Bremen* is on the high seas, and we're going to get her!"

With that, Winston kissed Clementine and went to war.

A Million Women at War

From the beginning, Clementine made telling contributions to the war effort. As the appetite of the fighting services for men and munitions grew, Winston turned to her for advice.

She assured him that if the picture was put clearly before them the women of Britain would flock to take over administrative duties and staff armaments factories.

So Winston wrote a speech, for women only, and gave the draft to



Clementine for practical comment. She suggested several alterations, and he followed her advice—it was one subject on which she was the undoubted expert in the family.

She was with him on January 27, 1940, in Manchester, when he addressed a packed gathering of women.

He spoke to them with passion and fire. He had come, he told them, to ask for a million women workers to help the war effort. It was a startling appeal, and it was also the beginning of something much more: a radical social change in women's way of life. They would have to free themselves as much as possible from the ties of family and home, and devote these hours of freedom to the war.

The historic speech inspired by his wife's "woman's sense" brought Churchill the million women workers he asked for—and millions more to the services.

Soon after, Clementine helped establish the revolutionary idea of women manning guns. At her luncheon table, the chief of Anti-Aircraft Command, General Sir Frederick Pile, proposed to turn operation of his anti-aircraft batteries over to women, freeing 40,000 men for fighting. "That is an excellent suggestion," said Clementine. Winston agreed. But their guests debated thoughtfully. The proposal ran



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counter to age-old civilized prejudice against involving women in wartime bloodshed.

"Everyone present," Pile recalled later, "was shattered with the idea. And some doubted whether women would make efficient substitutes for men on the gun sites."

"I don't see why not," Clementine argued. "If women can do all that they are doing in fire fighting and everything else, I don't see why they shouldn't man guns. They will probably do it better than men because the equipment needs a delicate touch."

The proposal was carried out. The Churchills endorsed the idea even to the point of letting their daughter Mary join the women gunners.

And Clementine was right. "The best batteries in the flying-bomb blitz," says Pile, "were those operated by women."

In the spring of 1940, Clementine saw her husband attain his life's ambition. Chamberlain's shaky government fell and, on the afternoon of May 10, Winston was summoned to Buckingham Palace and appointed Prime Minister. The terrible burden he would now bear would be Clemmie's burden, too.

Clementine's "Save-Winston" Campaign

WHEN THE blitz of 1940 began in all its fury, Churchill was determined to "take it" with his fellow Londoners. His Cabinet colleagues tried their utmost to dissuade him from taking deliberate risks; from going off into the night, walking-stick and torch in hand, "to see for himself." But it was Clementine who succeeded in outmanoeuvring him by using a secret weapon—herself.

Clementine's "save-Winston-from-himself" campaign began the day after Churchill made a tour of London's docks, walking right through an incendiary-bomb attack and barely escaping death.

"When he went on yet another tour," said Lord Ismay, "she went along with him. This time, concerned for her safety, he returned home before nightfall."

From then on, wherever the now-famous square hat and cigar went, the tall erect woman with the laughing eyes was usually there, walking two steps behind. Clementine tramped with Winston through mud and slush to visit gun sites; joined him as he drove in a jeep through the shattered streets giving his V-sign acknowledgment to the cheering people. She knew he undertook these journeys not only to instil encouragement into the people, but also because their continued spirit in turn strengthened him.

And when he stubbornly went out at night while bombs were falling, Clementine insisted on going, too. She never made any fuss about it, never said, "Look here, Winston, I don't want you to go." She knew

it would have been a terrible thing for both of them, since he would probably have done as she asked, but, for the first time, he would have been caged in.

The Luftwaffe tried repeatedly to bomb No. 10 Downing Street, and Clementine realized that the building would never survive a direct hit. "She persuaded Winston to use an air-raid shelter *as an example to others,*" said Lord Ismay. "Reluctantly, he agreed, and an unused basement near by was equipped as a special shelter for No. 10."

One night, Clementine made a tour of underground tube stations during a raid. It had been decreed that the stations could no longer be used as shelters. But thousands of Londoners continued to use them anyway, snatching what little sleep they could on the bare concrete platforms. After her inspection Clementine hurried back to Downing Street in time for dinner with Winston. As they ate alone, she explained what she had seen. "Something must be done for these people —and quickly," she insisted.

"You work something out, Clemmie," he said.

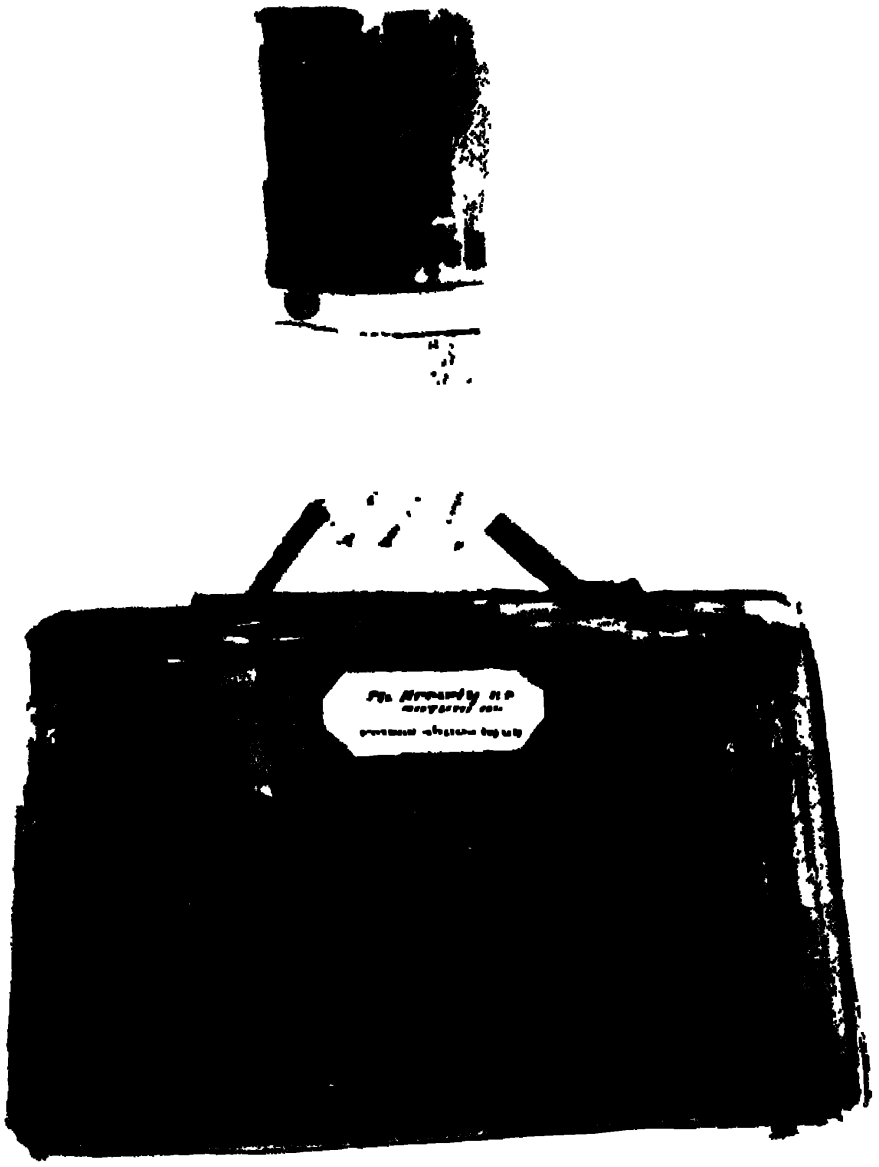
She began immediately, and recruited as her ally Lord Beaverbrook. She suggested that it was important for fixed places to be allotted by ticket in the tube shelters, to avoid overcrowding and unfairness, and to ensure orderliness. She also proposed the installation of bunks in which the shelter-goers could sleep. With Lord Beaverbrook's and Winston's blessing these ideas were soon put into effect. Two million bunks were ordered, and the tube stations became London's great air-raid dormitories.

Clementine worked indefatigably to bolster home-front morale. "She toured batteries all over the country, day and night, including isolated sites in remote places," said General Pile. "She was fabulous. She would shake hands with almost everyone, and especially the girls. She always enquired about their comfort, would go into their huts, inspect their beds, their equipment, the kitchens and their food, to make sure that everything was as it should be."

Clementine also made many tours during the raids when Winston was preoccupied elsewhere—and often without his knowledge. "She came with me on innumerable occasions round the first-aid posts," said Lady Limerick, of the Red Cross. "At a time when the raids were bad, it was a tremendous boost to people's morale that the Prime Minister's wife should turn up unannounced."

Lady Limerick noted another invaluable trait about Clementine. "She always managed to be present when the Prime Minister wanted her."

Despite her many activities, Clementine felt it her duty to remain at home as much as possible, for she knew that then, more than



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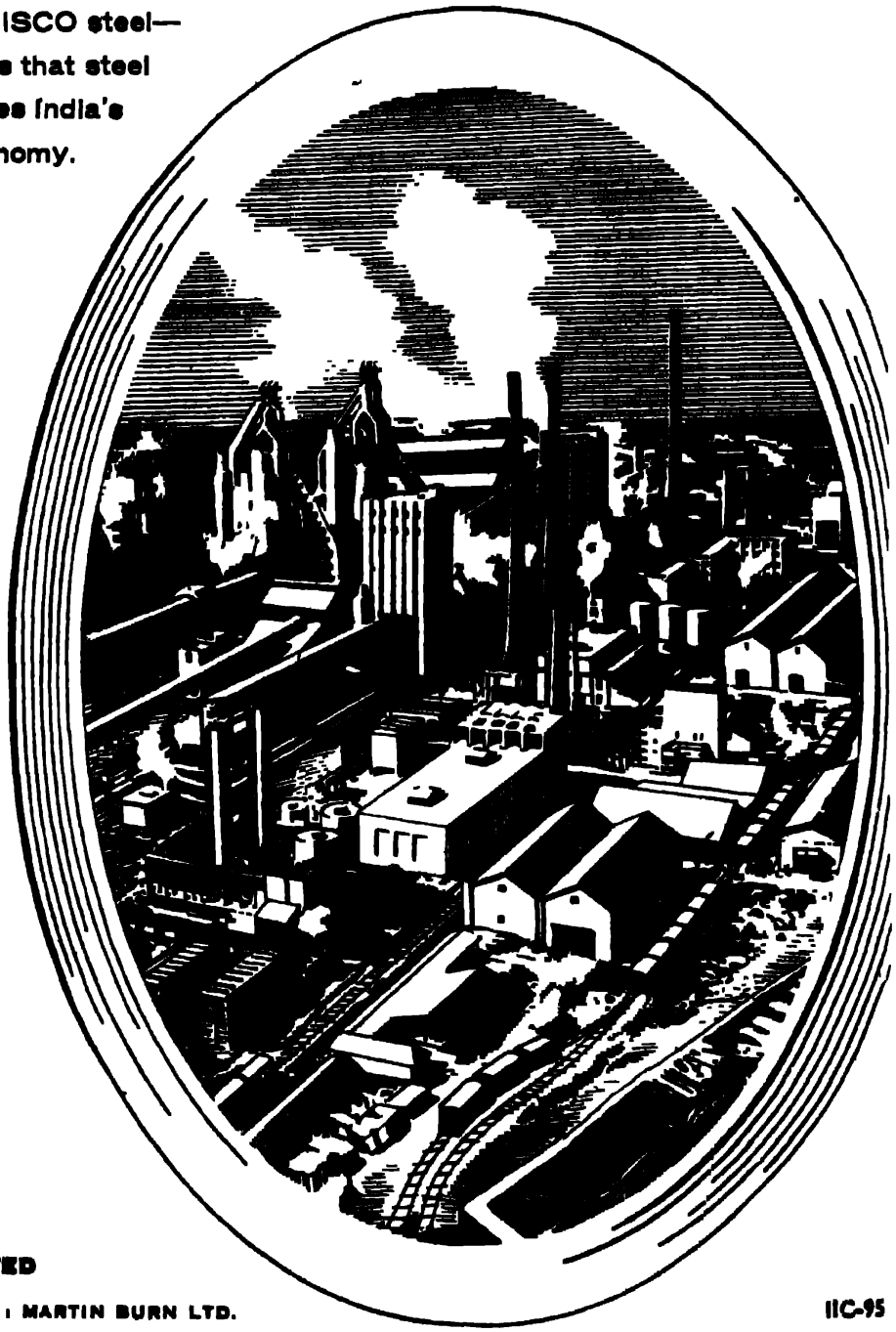
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at any other time in their lives, Winston needed her.

As soon as he walked into their home he would shout at the top of his voice, "Clemmie, darling! Clemmie, darling!" Her greeting was not demonstrative, often no more than a comradely hand on his arm, yet the effect on him was plain for all to see.

The tone of his voice always told her how the day had gone, and if it had gone badly she would comfort him. Just to be charmed by her voice, to hear her say gently, "It will come out all right; you are doing your best," gave him a tremendous spiritual lift. Millions idolized him—she gave him someone to idolize.

A Miracle in Marrakesh

For Churchill, 1943 was the most strenuous year of the war. He travelled more than 24,000 miles, attended conferences on three continents, drove himself night after night working until 3 or 4 a.m.

In February 1943 he contracted pneumonia, and Clementine, the only person who could handle "the world's most difficult patient," was able to keep him in bed by persuading him to direct the war from there.

"If he could not employ his phenomenally active brain," she told his doctors, "he would fret, and this would not help his recovery." And recover he did, with ministers, officials and secretaries streaming constantly to his bedside for discussions and instructions.

But the worst crisis came in mid-December of the same year. In Tunis, en route home from the historic Tehran conference, he developed pneumonia again. This time it was a far more serious case. Within days he was near death.

A chest specialist was flown in from Italy and a team of nurses from Cairo, but the finest nurse of all for Churchill flew to his side from London at the request of General Eisenhower.

When Clementine arrived, Churchill was too ill even to be told, but later the doctors permitted her to go to the bedside. She sat beside him and held his hand. Suddenly his eyes opened; husband and wife smiled at each other.

"The miracle of that moment is almost impossible to describe," said one of the Prime Minister's staff. "Mrs. Churchill's coming there made an almost unbelievable difference. It was as if by holding his hand she was giving him a transfusion of her own spirit and strength."

Though during the first days Churchill was only semi-conscious, she stayed by his bed for hours, so that whenever he opened his eyes he could see that she was with him. Gradually his temperature began to subside, and after two weeks he was able to resume work.

But Clementine, as well as Lord Moran, Churchill's physician, insisted on a thorough convalescence

in a warm climate. She suggested that Marrakesh, with which he had fallen in love during a pre-war family visit, would be ideal.

There, with each day of rest and sunshine, he recovered rapidly. Clementine had brought him something she knew he would want—his easel, canvases and paints, in which he became absorbed for hours.

Years before, just after the disaster of the Dardanelles, Clementine had suggested that Winston take up painting, and he has been a prodigious amateur artist ever since.

As he grew stronger, the two of them would take drives together, enjoying glorious views of the Moroccan countryside and the snow-capped Atlas Mountains. Every two days she organized a picnic to a different beauty spot in the district; nearly everybody in their party, including visiting generals and ministers, would go there and relax —surrounded by a protective guard of military police. Good surroundings, good food, good company, Clementine knew, were the best medicine for Churchill.

The day came when Lord Moran and Clementine pronounced him fit enough to travel home. At Paddington Station, London, all members of the War Cabinet were on hand to welcome them. Though his arrival



had been kept secret, a cheering crowd soon gathered.

There were cheers again when, within a few hours, Churchill entered the House of Commons and looked up at his wife seated in the gallery. The eyes of hundreds of M.P.'s joined his own to gaze at the slender, smiling woman above them. And from the distinguished members came a new roar of cheering—a grateful tribute to the woman who had brought their leader back.

Journey to Russia

EARLY in the war Clementine had suggested that a special Red Cross fund be devoted to sending medical supplies to Russia. The effort was enormously successful; nearly £8 million (Rs. 1·6 crores) was collected by voluntary contribution, which paid for huge amounts of clothing, drugs, X-ray equipment, ambulances and other material shipped to the Soviet Union.

In recognition of her labours, Marshal Stalin in 1945 invited Clementine to visit Russia. She was delighted at the opportunity to visit this theatre of war, but her journey also had a dual, unpublicized aspect. Winston had become seriously troubled by the deterioration in the relationship between Britain and the Soviet Union, and he was anxious to know the pulse of the Russian people Now that victory

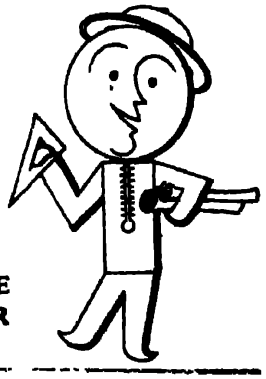
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seemed imminent, Clementine felt she could leave Winston for a few weeks. (But the instant she left, the restraining influence that had disciplined his phenomenal appetite for work disappeared, too. During her absence he seldom retired for the night before 4 a.m.)

In Russia, Stalin placed a train at her disposal so that she could tour the countryside at a leisurely pace. Appreciative crowds applauded her everywhere she went, in hospitals, orphanages and children's wards. Despite the language barrier, she helped the Russians she met to a better knowledge of their allies, and gathered impressions that were to prove invaluable to Churchill.

But in the midst of her journey, a deep personal loss overtook her. Molotov, the Russian foreign minister, and his wife boarded her train at Moscow. "We have come with bad news," Molotov said. "President Roosevelt is dead."

The news came as a tremendous shock to Clementine. The two families had joined in what Winston called "a friendship forged in the fire of war." They had corresponded warmly and regularly, and visited each other whenever they had the chance. Clementine recalled the wit and laughter they all had shared, especially Winston and F.D.R.

The death of Roosevelt was even more shattering because she knew that at such a moment Winston would need her. She wanted to fly home, but knew she couldn't. Instead she waited for the call she was sure would come. It did, and together, over the long-distance phone, they shared their sorrow. "I

On her wartime Soviet tour, Lady Churchill, Chairman of the British Red Cross Aid to Russia Fund, talks to the defenders of Stalingrad



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have lost a great friend—one of the greatest ever," he said.

As Clementine continued her tour, the war in Europe approached its final phase. From the British Embassy in Moscow she received her news of climactic events—the capture of Mussolini, the death of Hitler, mass surrenders of German units. On May 7, when she learned that Germany had surrendered unconditionally, she longed to be with Winston in the hour of triumph.

Over the Embassy radio she heard how Winston's car was pushed from Downing Street almost to Parliament by cheering crowds. And, Clementine recalls, "I heard my husband's voice, broadcasting the announcement for which the world had been waiting"—his victory-in-Europe statement.

On May 14, Clementine flew into Northolt. Winston, waiting there for her, greeted her warmly.

They had been parted during historic days. They were to be together during still more momentous ones.

Victory—and Defeat

NAZI GERMANY was crushed, but Clementine knew that, to Winston, the task was far from over. Two victories were yet to be achieved—the war with Japan, and the reconstruction of Britain. But Winston was not to share in these victories.

What neither he, nor Clementine, nor any of his entourage realized, was that the nation's new religion —Churchillism—was not reverence for a policy, but worship of a man. The masses were still suspicious of the class he represented.

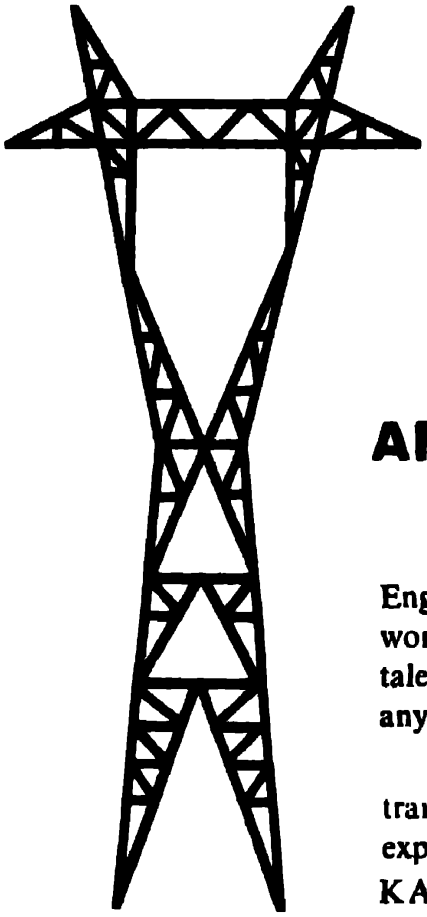
Since Winston had little time for internal affairs throughout the war it was Clementine who kept him in touch with the people. She began to caution him of the growing, almost overwhelming desire of both working and middle classes for social reform. He listened to her advice but stressed his anxiety to avoid party politics until the great task of reconstruction was well on its way. "At the very least, Clemmie," he said, "there should be no General Election until after the end of the war with Japan."

But pressure within the Labour Party was too great. The Coalition Government was dissolved, and elections were to take place in July 1945. Winston hated the idea of a political campaign when he was still so busy with the war effort. Accordingly, much of the burden of his personal election arrangements fell on Clementine's shoulders. As always, she accepted more than her share.

Together, they embarked upon a thousand-mile tour of the country. Though for years Clementine had not engaged in public speaking, she took to the platform again. But with each electioneering day, she observed Winston's impatience grow with what he felt to be an ill-timed interruption of the completion of the war. In a radio broadcast, he made personal attacks on

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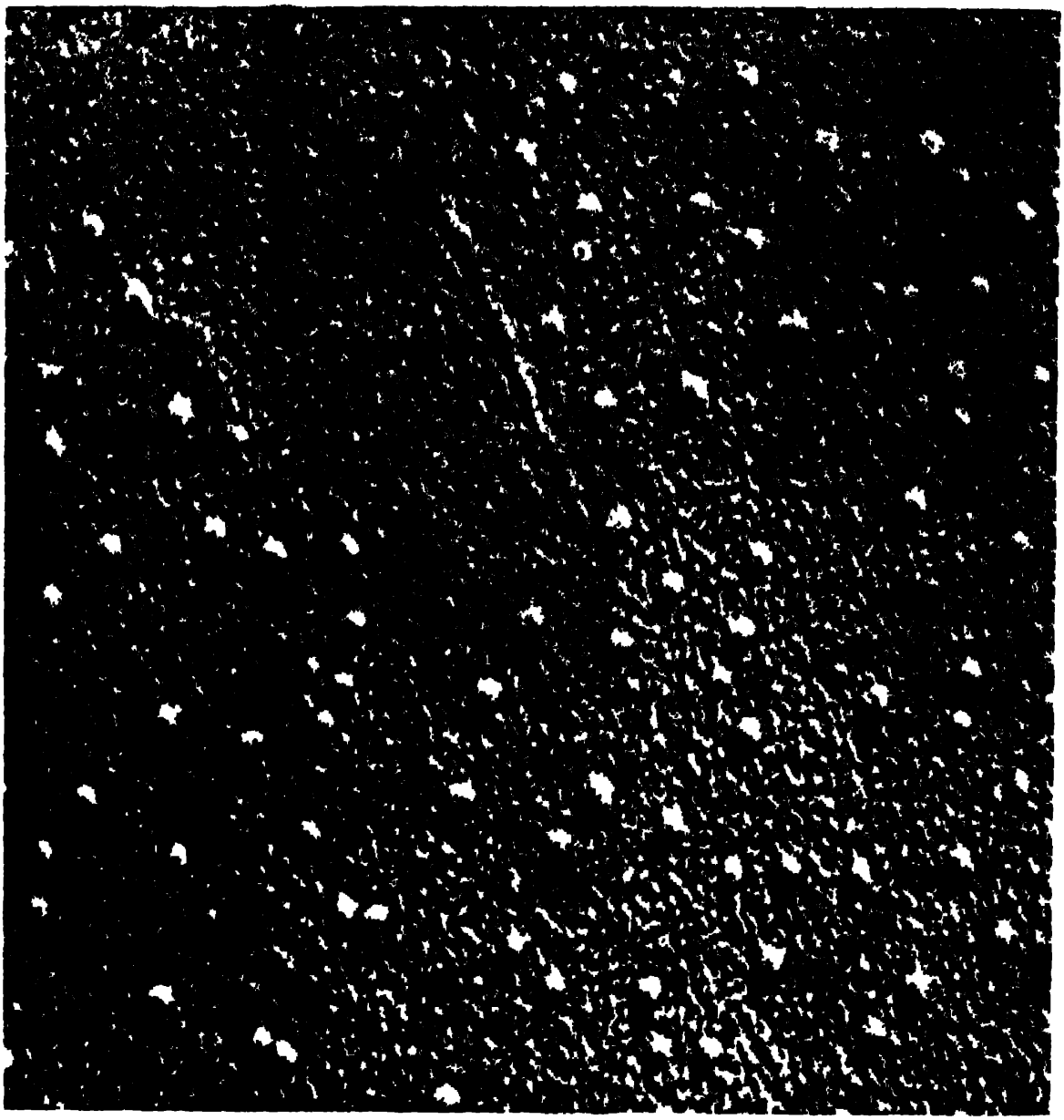


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Labour leaders who had served with him in the Coalition Government. He warned that socialism would result in a "Gestapo." But his tactics boomeranged, and public opinion began to harden against him.

Clementine sensed this changing opinion and warned Winston. Normally he treasured and respected her advice, and would quickly heed a gentle admonition. But now, almost for the first time, her advice seemed to fall on deaf ears. As his harsh and humourless campaign continued, people began to wonder what had become of the gay, smiling Churchill who hitherto could always see the funny side of higher statesmanship.

On the eve of the elections Clementine made a tour of Winston's constituency at Woodford, Essex, addressing six mass meetings and facing stormy heckling.

As the votes were counted she returned to Woodford and was stunned to find a steadily mounting poll in favour of her husband's opponent. She was so shaken that she telephoned Winston, to hear equally staggering news of socialist gains pouring in from all over the country. She didn't wait for the Woodford result. She had to be with Winston.

Although he retained his seat at Woodford, it was obvious by noon that defeat for his party was a fact, to the astonishment of the whole world.

Clementine bore the terrible cruelty of the moment with him. But, as a politician's wife, she knew that gratitude belongs to history, not politics. Firmly, sympathetically, she emphasized to him that the crushing defeat inflicted upon his party in no way brought into question his place in history, or in the affection and gratitude of the people.



The candidate for Woodford and his wife on tour during the 1945 General Election campaign. Churchill was returned with a 17,200 majority

Many of their friends urged him to leave Parliament and devote himself to writing the history of the war. Clementine absolutely disagreed. For Churchill himself had once said, "To leave Parliament would be unthinkable—I am a child of the House of Commons."

So Winston and Clementine

Churchill moved out of 10 Downing Street. But the Churchill spirit remained unbowed.

"We shall be coming back, Clemmie," he said as the door shut behind them.

Showing her wisdom at its best, Clementine took Winston on a long holiday trip, away from England and the scene of his defeat. In so doing, says their friend Sir Tom O'Brien, "she saved his mind, saved his dignity. Her realization that her husband was growing bitter made her decide: 'This has got to stop'—and stop it did.

"Wherever they travelled, they received the acclaim of peoples he helped to free from tyranny. Their gratitude helped Clementine to breathe new life, new fight, back into Winston."

Then they came home. The Churchills have lived in many houses, but they have had only one real home—the place which has brought them their greatest years of happiness, which has been their refuge during good and bad times —Chartwell Manor, in Kent.

Purchased in 1922, Chartwell excited Winston and Clementine more than anything else they ever bought. Together they planned the hedges, flower beds and lawns. Winston personally supervised structural alterations to the house, while Clementine concentrated on the interior and on the layout of the gardens.

Chartwell had been officially closed during the war, but many times Winston and Clementine would long for a sight of the beloved house, and would make sudden trips there with some of their staff. On one occasion when the news was bad, Clementine said, "Let's go home this evening," and Winston snatched gratefully at the momentary escape.

That night, they walked in their dressing-gowns through the rooms of Chartwell, and next morning they strolled arm in arm through the scented gardens. The rhododendrons and magnolias were blooming, and the paths were overgrown with weeds and grass. War seemed a long way from that haven of peace. They returned later in the day to Downing Street, strengthened and refreshed.

After the war, although Churchill was to spent much time in his London residence at Hyde Park Gate, the lovely manor was reopened, and it has remained the scene of many extended visits and holidays to this day.

The ivy-covered stone-and-brick house stands upon 82 acres of landscape and farm. Its rooms are quietly furnished, in warm and delicate colours.

The atmosphere reflects Clementine's feeling that "a home should be happy, gay and comfortable, where children can be brought up and where true peace and contentment can be enjoyed."

Winston and Clementine occupy

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separate bedrooms. These sleeping arrangements are essential, for Winston's bedroom is also, in effect, an office in which he spends hours, often late at night, looking at correspondence and dictating.

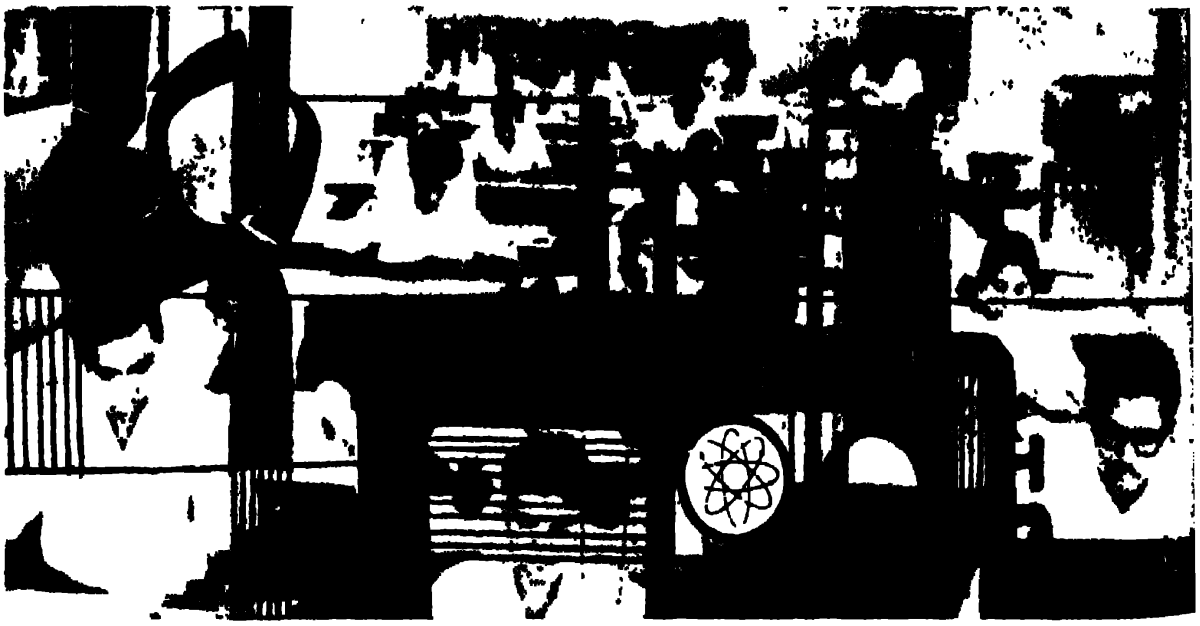
Clementine usually rises at about 7 a.m. Her bedroom is spacious, and austerely furnished with bed, wardrobe and dressing-table. She sets her silvery hair herself and has breakfast in bed.

At about 8.30, in the room above, Winston is also having breakfast. Husband and wife seldom meet until lunchtime.

Winston has said, "My wife and I have tried two or three times to have breakfast together, but we had to stop, otherwise our marriage would have been wrecked!"

Near Clementine's bedroom is Winston's magnificent studio. The boarded floor is bare, for this is the functional, much-lived-in room of a hard-working artist, not a dilettante. Half-finished paintings rest against the walls. Palette and paints lie on a table ready for use. And dominating the south wall of the studio is a portrait of the woman who first handed Winston a paintbox—Clementine, gay-hatted and smiling, painted in a haze of blue.

Beginning around 9 a.m., Clementine dictates letters and deals with household affairs, walking about the bedroom while she talks.



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As ideas occur to her, the room becomes littered with scribbled notes —probably the only lapse into untidiness in her well-ordered life.

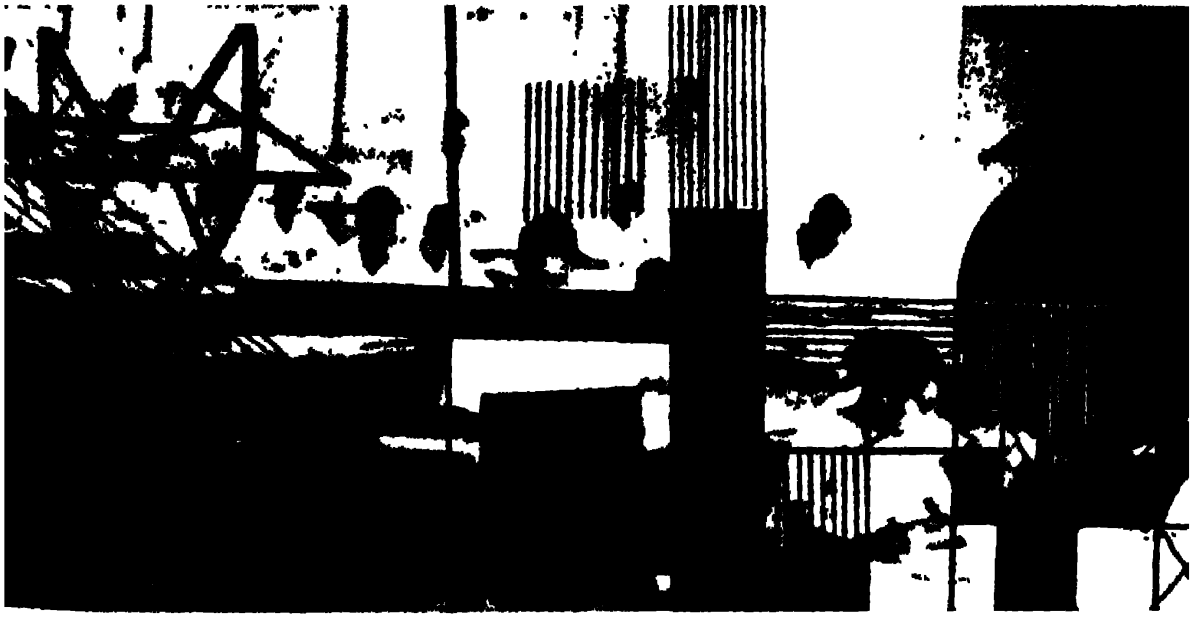
Before lunch and after dinner, in summer, she plays enthusiastic croquet with a keen eye and steady hand. Sometimes, wearing slacks, blouse and gloves, she works in the garden among her beloved roses. Going about Chartwell, she (though nearly 79) moves easily and lightly, with the well-known grace that makes people say, "She seems to get lovelier each year."

A great deal of her time is spent thinking up new methods of keeping Winston on time. His unpunctuality is one of the terrors of the household. Occasionally she has given him a sharp lesson.

A member of their staff recalls one such instance: "I was working in Winston's bedroom," she says. "He was resting in bed. Clementine was in the next room, preparing to go out for the evening. She kept popping her head in and saying, 'Are you getting dressed yet, Winston? Look at the time.' He would reply, 'I'll be all right.' He said it took him 13 minutes to bathe and dress, and he knew he could do it.

"She kept on until he finally said to me, 'I'll have my bath now.'

"Clementine called me into her bedroom. 'Has he gone to have a



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bath?' she asked. I said that he had, and she replied, 'Good! Let me know when he is fully dressed.'

"In due course I reported that Winston was ready.

"'Excellent!' Clementine said. 'Now lock my door.'

"Mystified, I did so.

"'Now,' said Clementine, 'he can wait for me.'

"She was completely dressed, hat and everything, and she proceeded to take off every stitch. Then she said, 'Now he can wait until I have put all my clothes on.' And deliberately, leisurely, she proceeded to do just that."



In a moment of relaxation at the London Zoo, Lady Churchill cuddles a lion cub

"As soon as you go into Chartwell Manor," says Sir Tom O'Brien, "you know she is mistress of the house; you are aware she rules the home, and that you are in an Englishwoman's castle.

"Winston in his own home—in spite of the fact that he did so much of his work at home—was never the same brash, driving personality that he was in the House of Commons. He was still the same fantastic force, but his wife would make it plain you are not in Downing Street, not at a Cabinet meeting, not in Parliament—you're at home. This home discipline of hers was essential, because without it he would have burnt himself out long ago; he wouldn't have lived all these years. She is the only person in the world from whom he takes discipline."

The Ultimate Honour

ONCE during a dark hour Clementine opened her heart to a close friend, Lady Diana Cooper, and revealed her deepest thoughts—thoughts she probably would not have shared even with her husband. It was during the war, and Lady Diana was talking of the day when the war would be over, and what the country should do to honour its great leader.

Calmly Clementine said, "I never think of after the war. You see, I think Winston will die when it is over."

She paused. "We're putting all we have into this war, and it will take all we have."

It was a curiously calm and sad



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a Sabavala, of course—for his private collection of contemporary Indian paintings. He knows a good painting when he sees one. He also knows a good tie—that's why he always wears ties by Zodiac. The tie he is wearing is a Zodiac 'Kingston.' ● Zodiac Ties are available in imported fabrics, handloom silks, brocades and wonderful, washable 'Terylene.' Exclusive, exquisite and exactly right. ● Write to Metropolitan Trading Company, 1076 Haines Road, Bombay 18, for Zodiac's "Guide to Elegance"—a booklet which tells you which ties to wear, which colours to choose and which knots to tie. It's FREE!

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conversation. She seemed quite certain, and quite resigned, to his not surviving long into the peace.

Yet Winston not only survived the peace, and the terrible blow of his party's defeat in the 1945 election. He became the vigorous leader of the Opposition, and in 1951 triumphantly returned to the premiership.

At 77 her husband once more held the destiny of his country in his hands. The famous poured into Chartwell to consult with Winston on the formation of the new Government, and Clementine again had her hands full as hostess.

Then came a still greater honour. Though Clementine had stepped in on many occasions when Winston was unable to make a speech, her supreme test as a stand-in occurred in December 1953 when he was awarded the Nobel Prize for literature, while inextricably engaged in the Bermuda Conference. Customarily, if the prize-winner is unable to receive the award in person, his country's ambassador takes his place.

But the Swedes, acknowledging the tremendous part she had played in her husband's career, invited Clementine to represent her husband in the ceremony.

While practising the speech in her suite in the royal palace in Stockholm, she admitted to her daughter Mary that, for the first time, she was having a mild attack

The Queen leaves No. 10 after dining with the Prime Minister on April 4, 1955—the eve of his resignation



of "butterflies." Sensing how she would feel, Winston dispatched a series of encouraging telegrams from Bermuda, ending with one, delivered on the morning before the banquet, that read, "Good luck and all my love, Winnie."

Before 950 distinguished guests, Clementine rose that evening and in a firm, clear voice delivered the 500-word acceptance speech Winston had written. At the end, she was greeted by a tremendous ovation. The most frightening minutes of her life were over.

Following the banquet came a great ball, which Clementine and Mary watched from a balcony overlooking the hall. Clementine, wearing a steel-grey evening dress with pale-blue tulle stole and a diamond tiara, was seated in the place of honour beside the King and Queen of Sweden.

There were 550 students at the ball. Suddenly, some of them started to sing, and everyone on the floor took up the words and melody of the song. It was "Oh, my darling, Oh, my darling, Oh, my darling Clementine!" — sung in English.

It was a rare, unforgettable moment. Clementine, who seldom reveals her emotions before others, now could not hide her tears. She stood up, waved and smiled as the serenaders clapped and cheered.

The Nobel Prize she had accepted had been to honour her husband. This demonstration was to honour her.

IN THE END, of course, only Winston knows how great has been Clementine's influence upon his career. He himself never underestimated that influence. "My marriage," he wrote, "was much the most fortunate and joyous event which happened to me in the whole of my life, for what can be more glorious than to be united with a being incapable of an ignoble thought?"

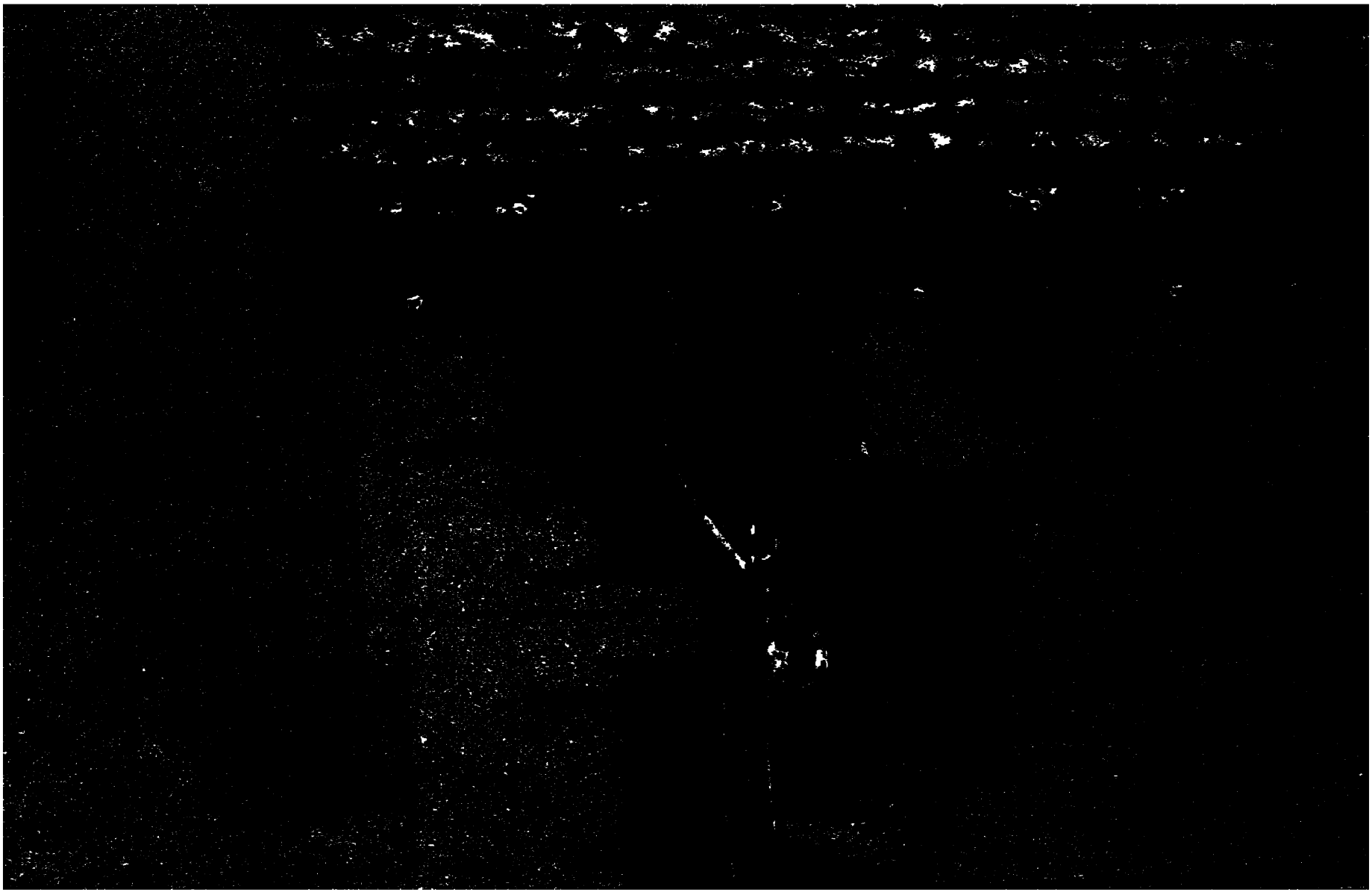
And again, "My most brilliant achievement was my ability to persuade my wife to marry me."

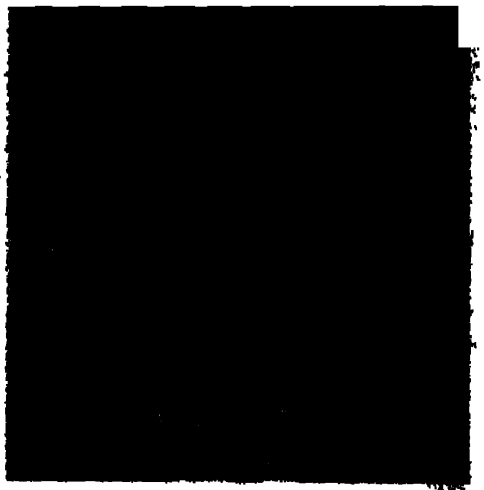
Those who know Clementine Churchill well are aware that she, an admirer of brilliant career women, could have made a considerable mark in her own right. Instead, she devoted herself to encouraging and giving stability to the fantastic genius that is her husband. How different might have been his career, and the history of the world, if she had chosen otherwise! THE END

Sir Winston and Lady Churchill at the window of their Hyde Park Gate home on his 88th birthday, November 30, 1962



PA-REUTER





"So Many Worlds— So Much to Read"

By Hector Bolitho *Historian and Biographer*

I was born in New Zealand and have fulfilled my boyhood dream: I have encircled the world three times, which is two up on Sir Francis Drake. I have lived in South Africa, Australia, Pakistan, the United States, Canada, Germany, Italy, Palestine and Jordan. I have spent some 30 years in England, and I have glanced at India, Mexico, Egypt, Ceylon and the South Sea Islands. The world has a pattern in my mind.

But there are disadvantages in this broad scattering of interest. It is not possible, sitting back in the comfort of one's sixties, to absorb and comprehend all that is happening and being thought in these countries today. And as I grow older the universe grows bigger: now we have to cope with the moon as a reality, whereas when I was young it was merely a glowing toy for poets to play with.

I cannot read every new book, study all the world reports in the magazines and newspapers; but I do find that by giving time each month to the absorbing articles in The Reader's Digest, I can satisfy some of my hunger for knowledge.

Frankly, I have developed a habit. When my copy of The Reader's Digest arrives, I spend an evening or two quietly in bed and settle down to the important monthly journey that the magazine provides. For the pages of The Reader's Digest have the magical gift of bringing the world to life.

Hector Bolitho.

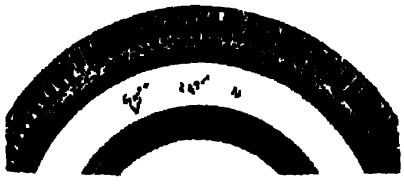
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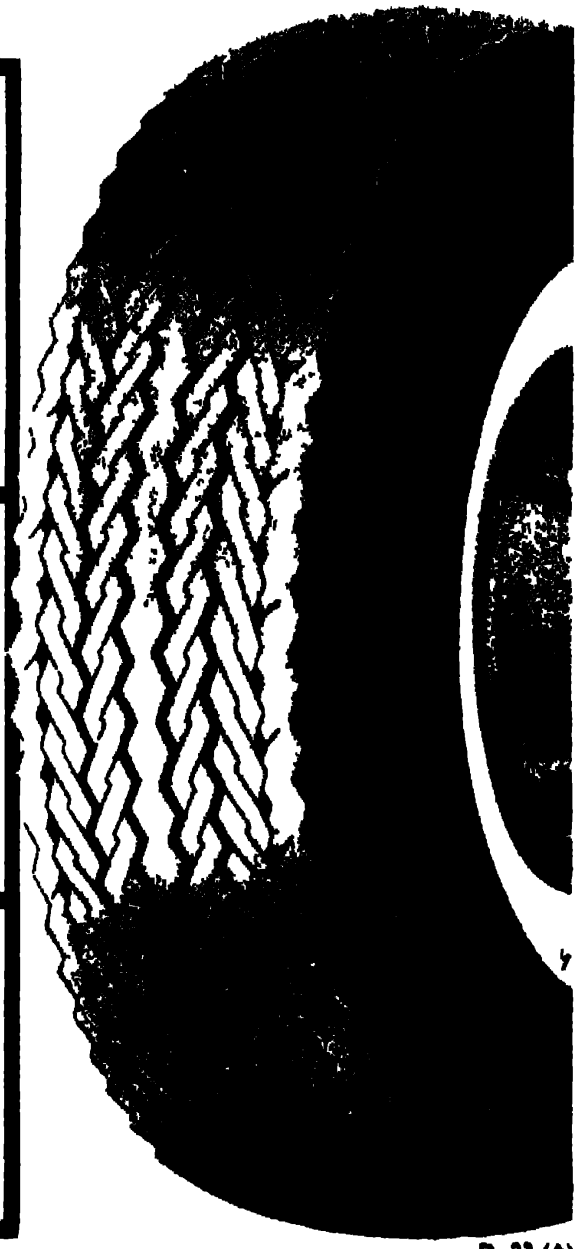
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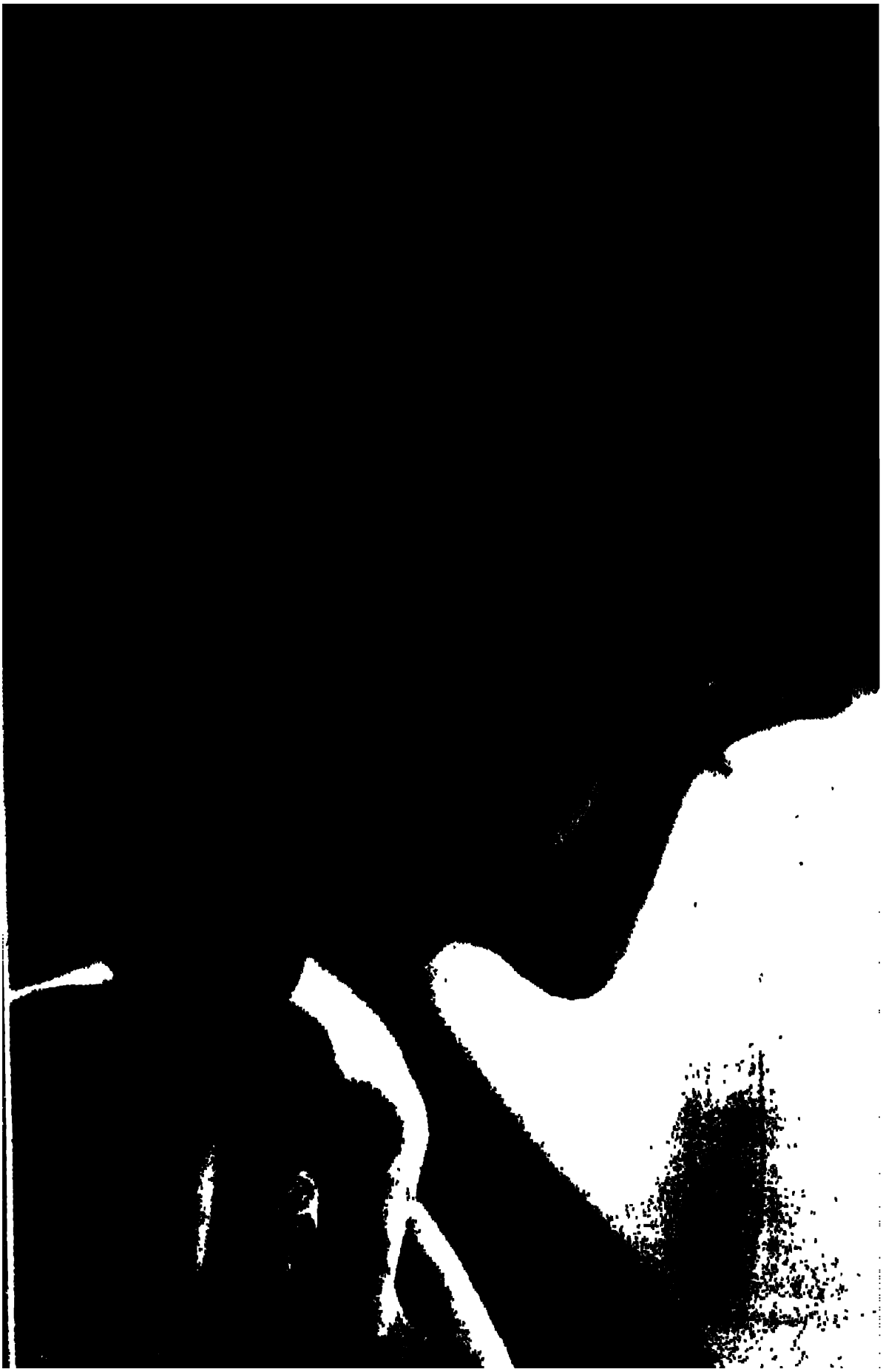
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B2/BRD-9B



It Pays to Increase Your Word Power

By Wilfred Fun

This is a comparatively difficult test. Tick the word or phrase you believe is *nearest in meaning* to the key word. Answers are on page 12.

(1) **grisly**—A: dirty. B: greyish. C: ghastly. D: hairy.

(2) **maudlin**—A: coarse. B: weakly sentimental. C: dishevelled. D: sordid.

(3) **unconscionable** (un kon' shun a b'l)—A: impossible. B: imperceptible. C: outrageous. D: very difficult.

(4) **livid**—A: black-and-blue. B: bright. C: completely disfigured. D: flaming red.

(5) **parsimonious**—A: tiresome. B: religious. C: formal. D: stingy.

(6) **propriety**—A: ownership. B: dignity. C: proper behaviour. D: wisdom.

(7) **trite**—A: clever. B: commonplace. C: impudent. D: uncalled for.

(8) **conscientious** (kon shi en' shus)—A: aware of. B: careless. C: shy. D: honourable and dependable.

(9) **enervate** (en' er vate)—A: to weaken. B: frighten. C: excite. D: invigorate.

(10) **obtuse**—A: stubborn. B: profound. C: stupid. D: blunt in manner.

(11) **sanguine** (san' gwin)—A: tactful. B: hopeful. C: sturdy. D: bloodthirsty.

(12) **pusillanimous** (pū si lan' i mus)—A: contemptuous. B: strong-minded. C: weak in body. D: cowardly.

(13) **propound** (prō pound')—A: to state formally for consideration. B: explain. C: develop. D: argue.

(14) **obsequious** (ob sē' kwi us)—A: insulting. B: dignified. C: fawning. D: secret.

(15) **lethal**—A: deadly. B: forgetful. C: gaseous. D: heavy.

(16) **poignant** (poin' yant)—A: weighty. B: painfully moving. C: apt. D: profound.

(17) **diaphanous** (di af' a nus)—A: almost transparent. B: smooth-surfaced. C: draped. D: modest.

(18) **balmy**—A: warm. B: refreshing. C: flourishing. D: healing.

(19) **inference** (in' fer ens)—A: feeling of inferiority. B: unimportant idea. C: secret thought. D: reasoned deduction.

(20) **ingenuous** (in jen' ū us)—A: imaginative. B: sincere and unaffected. C: clever. D: uncultured.

(*Now turn to page* 12)



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IT PAYS TO INCREASE YOUR WORD POWER

Answers to the quiz on page 7

(1) **grisly**—C: Ghastly, fear-inspiring; savage-looking; as, a *grisly* monster. Old English *grislic*.

(2) **maudlin**—B: Weakly sentimental, over-emotional, as, a *maudlin* song. Old French *Maudelene*, for (Mary) *Magdalene*, who was often pictured with eyes swollen from weeping.

(3) **unconscionable**—C: Outrageous; unreasonable; as, *unconscionable* behaviour. From *un-*, "not," and *conscionable*, "in accord with conscience."

(4) **livid**—A: Black-and-blue, as from a blow, discoloured, ashen-grey; as, a face *livid* with anger. Latin *lividus*, from *livere*, "to be blue."

(5) **parsimonious**—D: Stingy, excessively frugal, as, a *parsimonious* old gentleman. Latin *parsimonia*, from *parcere*, "to spare, save."

(6) **propriety**—C: Proper behaviour, decorum, as, to conduct oneself with *propriety*. French *propriete*, "property."

(7) **trite**—B: Commonplace, hackneyed; as, a *trite* remark. Latin *tritus*, "common."

(8) **conscientious**—D: Honourable and dependable, as, a *conscientious* worker. Latin *conscientiosus*, from *conscire*, "to know, be conscious."

(9) **enervate**—A: To weaken, deprive of energy or strength, as, "Hot, humid weather tends to *enervate* one." Latin *enervatus*, from *enervare*, "to make weak."

(10) **obtuse**—C: Stupid; insensitive, as, too *obtuse* to take a hint. Latin *obtusus*, from *obtundere*, "to dull."

(11) **sanguine**—B: Hopeful; of buoyant disposition; (in physiology, characterized by abundant and active circulation of blood); as, a *sanguine* temperament. Latin *sanguineus*, from *sanguis*, "blood."

(12) **pusillanimous**—D: Cowardly; excessively faint-hearted; as, a *pusillanimous* policy of appeasement. Latin *pusillanimis*, "small-spirited."

(13) **propound**—A: To state formally for consideration or solution; as, to *propound* a plan or a problem. Latin *proponere*, "to set forth."

(14) **obsequious**—C: Fawning; servile, as, an *obsequious* manner. Latin *obsequiosus*, from *obsequi*, "to comply with."

(15) **lethal**—A: Deadly; fatal, as, a *lethal* drug. Latin *letalis*, from *letum*, "death."

(16) **poignant**—B: Painfully moving; affecting, as, a *poignant* story. Latin *pungere*, "to pierce, sting."

(17) **diaphanous**—A: Almost transparent, showing light through its substance, as, a *diaphanous* gown. Greek *diaphanēs*, from *dia*, "through," and *phainein*, "to show."

(18) **palmy**—C: Flourishing, prosperous, bearing or worthy of the palm (the ancient symbol of success or triumph), as, the *palmy* days of Rome.

(19) **inference**—D: Reasoned deduction, loosely, a conjecture; as, to draw an *inference* from a man's actions. Latin *inferre*.

(20) **ingenuous**—B: Sincere and unaffected, artless, as, an *ingenuous* explanation. Latin *ingenuus*, "natural."

Vocabulary Ratings

20–19 correct	exceptional
18–17 correct	very good
16–15 correct	good
14–12 correct	fair



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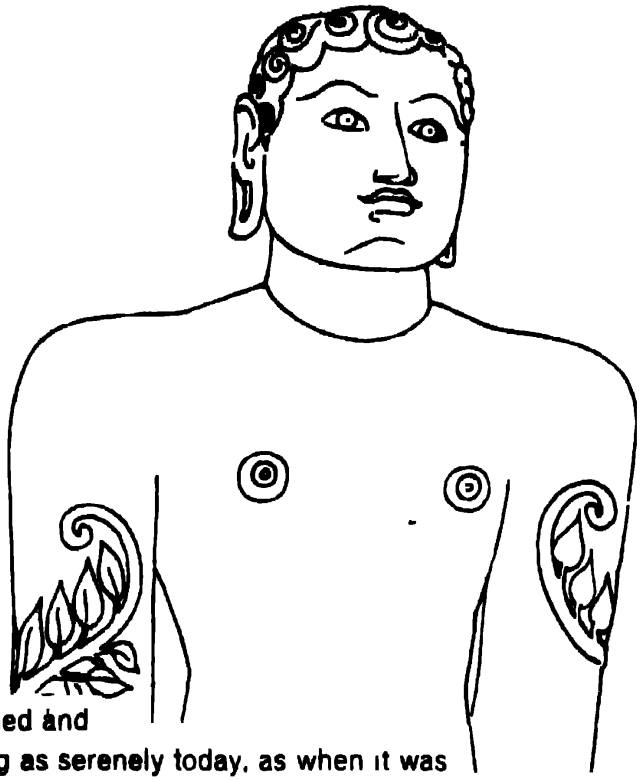
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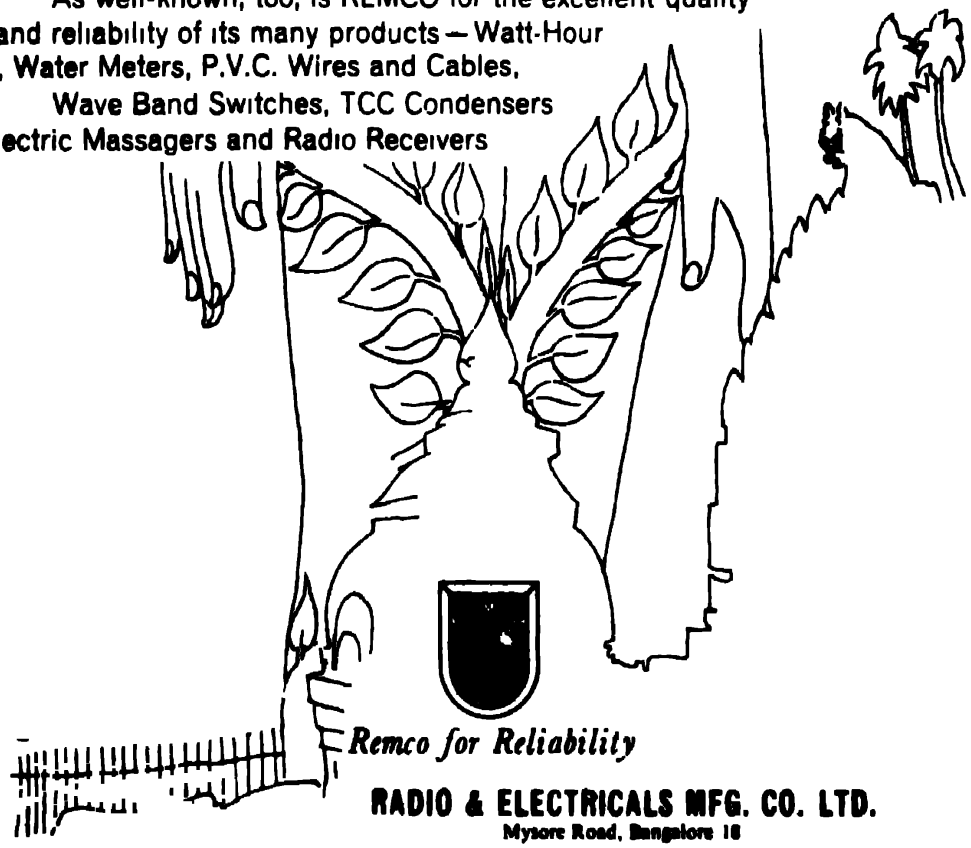
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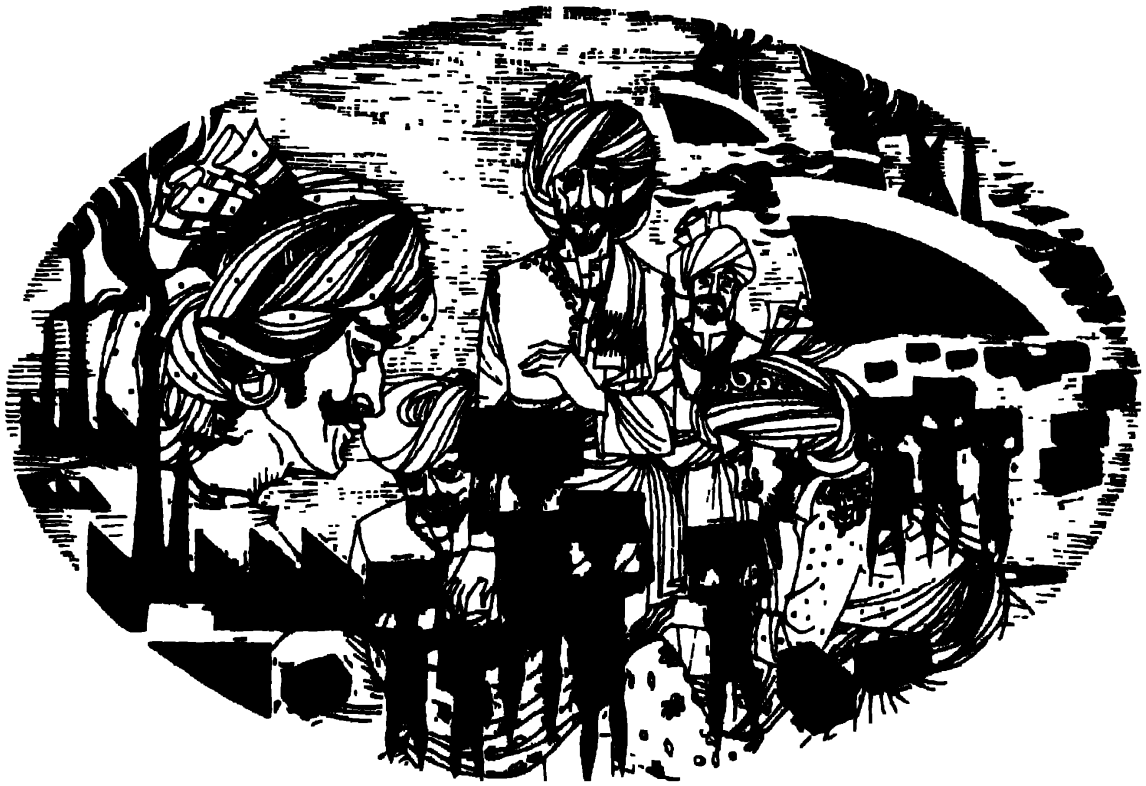
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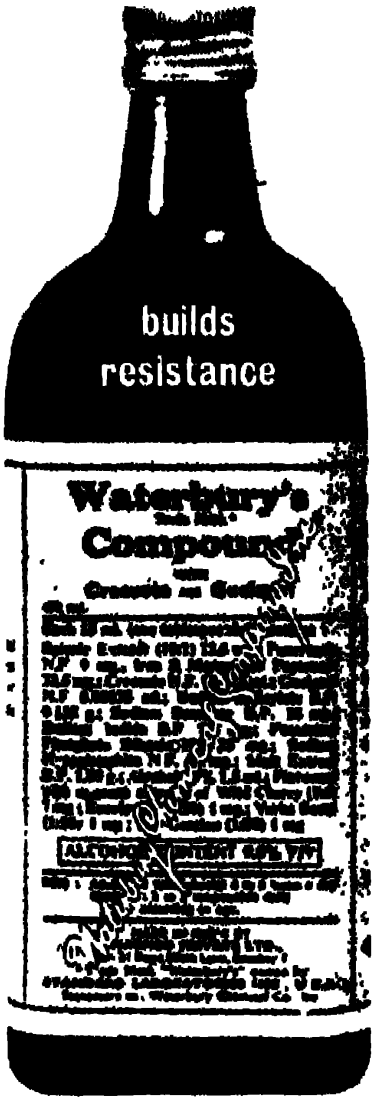


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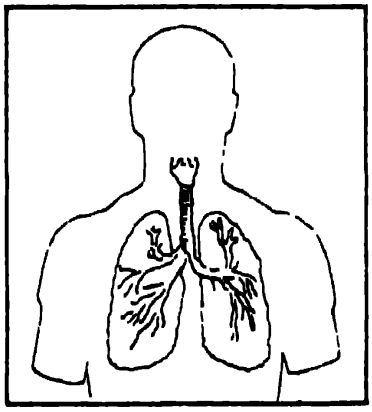






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HUMOUR IN UNIFORM

AFTER 20 years' service in the army, my uncle retired. Having few outside interests, he spent a good deal of time in the house, getting in his wife's way. Eventually she suggested that he join a men's club. He followed her suggestion. He has now completed his thirtieth year in the army. —T. R. J.

SOME MONTHS ago when Soviet long-range bombers were photographing U.S. warships, the decision was made to get pictures of their aircraft. Initial attempts were unsuccessful, but eventually American photographic aircraft intercepted one of the Russians and began taking pictures. The Soviet pilot, undoubtedly flustered, broke radio silence to call his home base. He indicated that he was being photographed and asked what he should do.

The answer from his base was short and to the point: "Smile!" —C. F. K.

ON LEAVE in Yokohama, a naval captain found himself some distance from his hotel and decided to take a taxi back. But he hadn't reckoned with the language barrier. He couldn't make the cabdriver understand where he wanted to go. Then the officer had an inspiration. He pulled out a match cover from the hotel. The driver's face lit up with a broad smile, the officer confidently got in and off they drove. Until the driver very proudly stopped—in front of the match factory! —MRS. H. V. TRAYWICK

JUST AFTER the war my daughter was employed by the army as a clerk-typist. A major event was the annual visit of the inspector general. The I.G. was known for his phenomenal memory and for his belief in direct action. During the inspection of my daughter's office, he stopped at her desk and asked how she liked her job and if she had any problems. She told him that she was happy with her job, but that the keys on her typewriter were sticking. The general turned to the officer in charge and instructed him to have the typewriter repaired.

The next year the same I.G. again stopped at my daughter's desk and, much to her surprise, asked if her typewriter had been repaired. When she told him that it had not, he picked it up and threw it out of the window, saying, "They'll take care of your problem now." They did! —H. M.

EVERYONE in the U.S. Marine Corps up to the rank of lieutenant-colonel and up to 36 years of age is compelled to qualify once a year with the regulation rifle. After the Marine fires a shot, the instructor asks him where he thinks it hit the target.

When John Glenn, who later became America's first man in orbit, fired the most difficult shot on the range, his instructor asked, "Where was that one, Major?"

"Well," Glenn replied, "it was a bull's-eye when it left here." —C. A. B.



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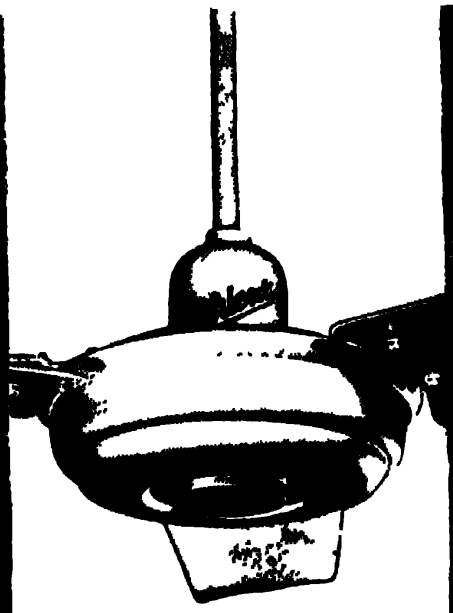
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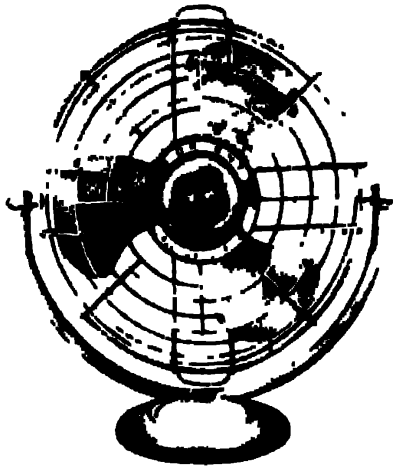
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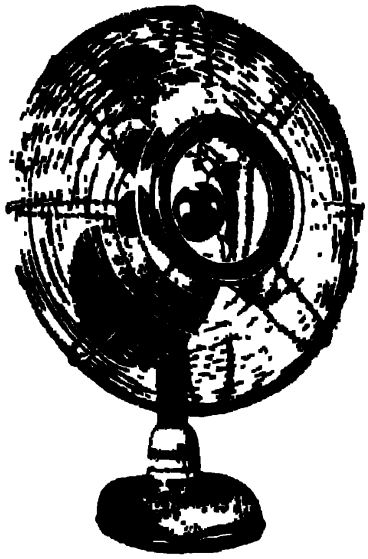
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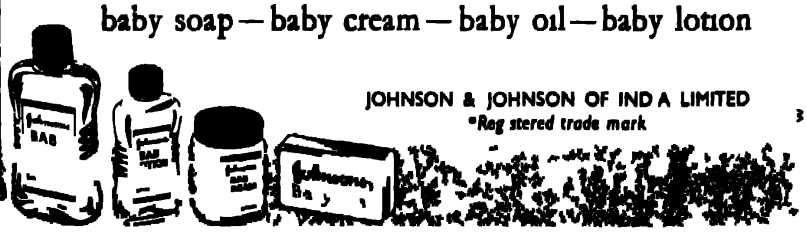


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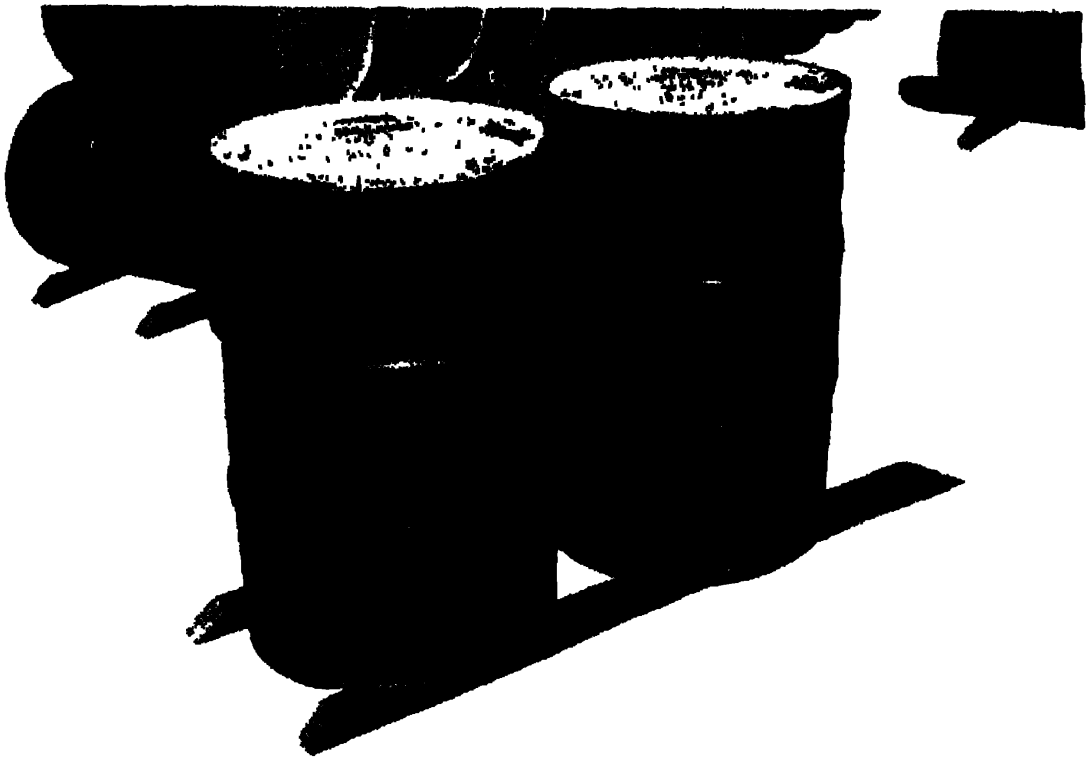
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Personal Glimpses

SIR ALEC DOUGLAS-HOME once told his colleagues how he managed to keep up his spirits during a week in which he was criticized by both Parliament and press. "My Scottish blood came to my rescue and reminded me that all the publicity was free." —UPI

THE EMINENT French biologist Jean Rostand was talking about his major work of scholarship, *Man*. His great tome studies at length the complex workings of the human machine, but Rostand says that as far as he is concerned a woman is infinitely more astonishing than a man:

"My wife can go out shopping and make more discoveries about the facts of life in two hours than I can produce in two years in my laboratory."
—NANA

SOON AFTER his marriage to actress Gertrude Lawrence, Richard Aldrich brought his bride to meet his family in Connecticut. Since several relatives were clergymen, Aldrich was apprehensive lest she say something they might think worldly.

At dinner, however, she spoke feelingly and reverently about religion. Only Aldrich was uneasy, wondering if anyone would recognize her words as the main speech from *Susan and God*, one of her greatest Broadway successes. —John McAleer

ONE EVENING at a writers' conference, Robert Frost was reading his poems and talking about some of his "technical tricks." He read a poem, paused to ask the audience in what metre it was written, and then had fun scolding those who did not know it was in hendecasyllabics. He was well cast in the role of the master craftsman, and he was having a good time.

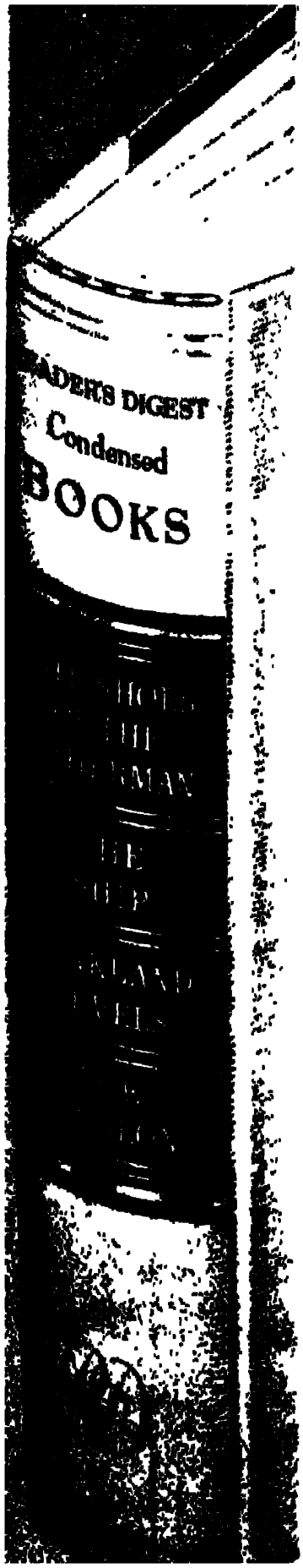
The applause had hardly died down when a dear old lady got to her feet, waving her arm furiously for attention. "But, Mr. Frost," she cried, "*surely* when you are writing one of your beautiful poems, *surely* you can't be thinking about"—and here her voice slurred the dirty words—"about *technical tricks!*"

Frost put his hands together, the spread fingers touching tip to tip, looked owlish for a moment, and then leaned forward into the microphone and said in a playfully gravelly bass: "I *revel* in 'em."

—John Ciardi, *Dialogue With an Audience*

IN SPITE of his advanced age, Konrad Adenauer while he was Germany's chancellor received numerous marriage proposals. According to his *aides*, the chancellor seemed uninterested and told his secretary, "Just put them in the non-aggression-pact file." —UPI

THOREAU once observed that if he knew for certain that a man was on his way to see him with the single purpose of trying to help him, he would run for his life. —S.A.C.R.



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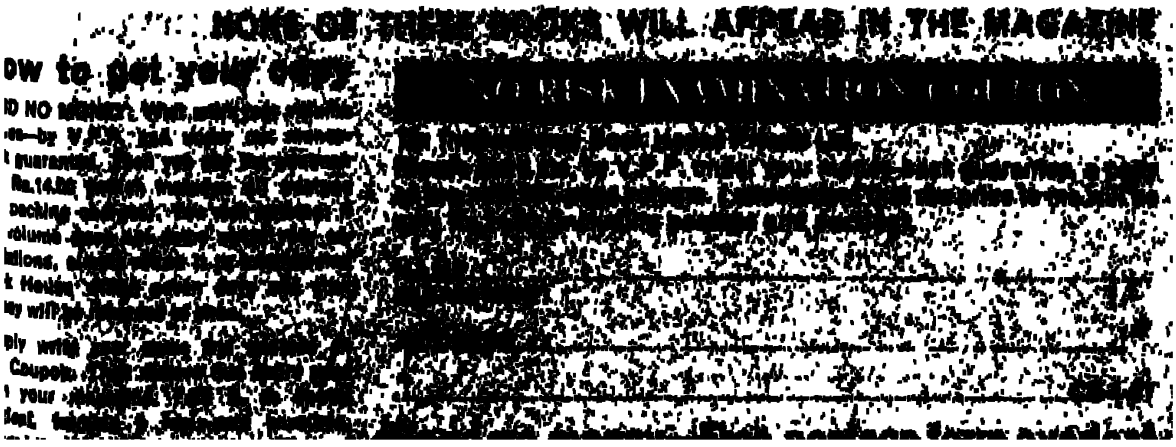
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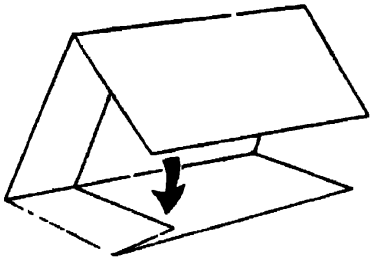


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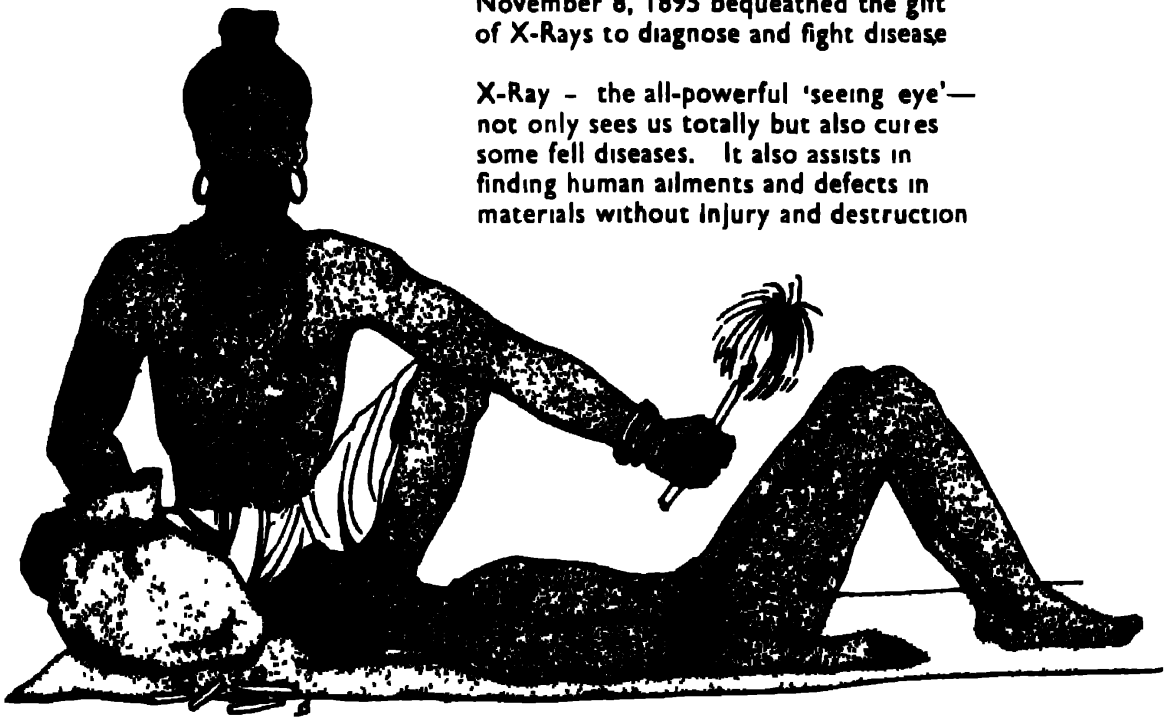
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THE WORLD'S TOP CIVIL SERVANT

From his high-up office in the United Nations building, Secretary-General U Thant looks out on a world divided. His mission: to try to close the breach

By Noel Busch

As Secretary-General of the United Nations, U Thant is the world's most renowned civil servant. A serene, friendly, small-statured man of 55, he owes his present eminence less to his administrative abilities, though they are considerable, than to a series of accidents—of which the most relevant is that his birthplace happens to be Burma.

It was in September 1961 that his predecessor, Sweden's Dag Hammarskjold, died in a plane crash in Northern Rhodesia. Since the U.S.S.R.—with its veto power—was averse to a successor from the free countries of Europe or America or any of their allies, and the Free World was averse to installing a communist, the new Secretary-General would probably have to come from some neutralist nation in Africa or Asia—excluding India, Israel, the Arab countries and other places which had difficulties of one sort or another with the organization. With most of the small, new nations of Africa ruled out by a dearth of qualified candidates, it became clear that Secretarial timber, like teak, was a botanical rarity to be found only in South-East Asia.

As Burma's ambassador to the U.N. since 1957, U Thant was well known and well liked by most of his

102 colleagues in the General Assembly. He was chosen to fill the vacancy. Elected to the office of S.G., as the Secretary-General is called in U.N. circles, he is now serving a five-year term that ends in November 1966. His salary and allowances add up to a tax-free Rs. 3·5 lakhs a year.

U Thant's approach to the job is totally different from that of either Hammarskjöld or *his* predecessor, Trygve Lie of Norway, the first S.G., who resigned in response to severe Soviet pressure in 1953. Hammarskjold, for example, as his private papers make clear, was a highly-strung intellectual whose almost mystic conception of the U.N.'s destiny included a conviction that he had been chosen as the custodian by the Christian deity. U Thant is much calmer about his work and, as a Buddhist, sees himself more as the instrument of an impersonal fate.

The profound philosophical disparities between the two men have naturally been reflected in their manner of working and living. While Hammarskjold put in fantastically long office hours, he also relished the cultural amenities of metropolitan life. The present S.G. also puts in a full working day until 7.30 or 8 p.m. On summer evenings at his comfortable home in suburban Riverdale, New York, he likes to swim in the small outdoor pool. Then, wearing a Burmese skirt-like *longyi*, he dines with his wife, daughter and son-in-law and spends the evening browsing through the newspapers or watching sport on television.

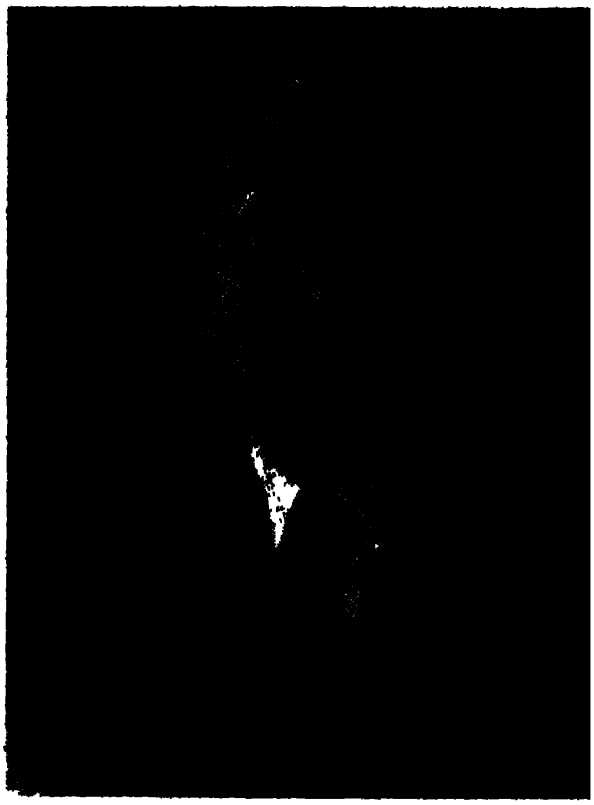
Hammarskjöld, always eager to use the powers of his office to the utmost and sometimes a little more than that, was a compulsive traveller, ready at any moment to jump on a plane and head for trouble spots.

U Thant has travelled widely also, but more often in an effort to acquire information and advice than to dispense it.

According to Paul Hoffman, head of the U.N. Special Fund, another striking difference is that "Dag Hammarskjold was often too reserved to express his thoughts. But U Thant, though he has a perfect poker face, usually tells you what he has in mind, with no holds barred." For example, at a press conference during his visit to Finland, in 1962, he did not hesitate to refer to the secessionist government of Katanga Province as "a bunch of clowns."

Perhaps in keeping with U Thant's expressed contempt for the "honeyed words" of conventional diplomacy are the indications he has given on more than one occasion that, in the worldwide struggle between the Free World and communism, he finds little to choose between adversaries. Thus, in a speech a few weeks after the Cuban crisis of 1962, U Thant rebuked the United States for its failure to

appreciate the significance of the change in Soviet political climate since Stalin's death. He remarked that, while "we may or may not agree with his philosophy or his aims," Khrushchev "does not want war." In view of the recent history —Khrushchev's secretive moves to install missiles in Cuba, and his lies to President Kennedy about their presence—the rebuke to the United States seemed poorly judged. At another time, U Thant dismissed the U.S.-Soviet deadlock over the number of inspections required for a nuclear-test agreement as a mere "game of arithmetic." "What is needed most in these tense times," he pontificated, "is the will to compromise."



Granting that U Thant aims to be impartial, some Western observers wonder whether he has a clear enough view of the moral issues at stake in current international disputes. They feel that his impartiality is rather like that of a policeman whose response to a holdup is not to arrest the assailant, but to suggest that his victim settle the dispute by compromise. One result of this attitude would seem to be a relative indifference to the outcome of the cold war.

Among the "impartial" measures that U Thant has helped to advance has been the Indonesian take-over of West Irian on threat of force. He is known to favour admission to the U.N. of China, which he predicts will within ten years rank as one of the world's great powers.

Not long ago U Thant said that "the division of the world between the rich and the poor is much more real and much more serious, and in the long run much more explosive, than the division of the world on ideological grounds."

A belief that there is not really much fundamental difference between the two parties to the cold war perhaps demonstrates the workings of an Oriental counterpart to the old Western fallacy that all Chinese look alike: since communism and capitalism are both products of the West, they must, to that extent at least, seem similar to each other from an Oriental viewpoint.

U Thant was born in the town of

Pantanaw, in the Irrawaddy Delta, where his father owned a small rice mill. In the near-by town of Wakema lived another boy two years older, who was eventually to become Burma's Prime Minister, U Nu.

The two boys Nu and Thant ("U," pronounced *oo*, is a Burmese honorific applicable only to adult males) played together, and later both went to Rangoon University.

During the mid-1930's, Rangoon University seethed with talk of nationalism. Undergraduates Nu and Thant became deeply involved in the Burmese nationalist movement. After his second year, Thant left the university to become headmaster of a school of which U Nu was superintendent; and when U Nu was jailed for his political activities, U Thant took care of his family.

In the late 1930's, U Thant gave an increasing portion of his time to writing articles and books on international matters.

Then came the invasion by the Japanese, who, having chased out the British-sanctioned Burmese government, installed the revolutionary students in its place. The Japanese planned to use the young students as a docile apparatus. Instead, the students ran an underground resistance movement. They were rewarded at the close of the hostilities when Britain allowed them to stay in office and promised them the independence they had asked for. U Nu became the first prime minister when independence was granted in January 1948.

In U Nu's somewhat erratic administration, U Thant was his right-hand man. When ten years of socialism had reduced Burma's economy to chaos, U Nu handed over the reins of government to General Ne Win. U Thant was by then at the United Nations as chief of the Burmese mission. U Thant held that position until he was raised to his present post.

U Thant's offices on the top floor of the huge 38-storey glass U.N. secretariat building afford a splendid view of the New York skyline that is "helpful for meditation." But U Thant's opportunities for solitary inward contemplation during working hours are at best fragmentary. His job is a demanding one. In addition to the day-to-day details of administration, there are many deep uncertainties about the U.N. which U Thant—and indeed the whole world—must ponder.

One major problem is the ever-increasing disarray of the U.N.'s finances. The regular net budget, for ordinary housekeeping expenses, now runs at some Rs. 38 crores a year. Of this the United States is obligated to pay 32·02 per cent, the U.S.S.R. 14·97 per cent, down to 0·4 per cent each for Bolivia, Cambodia, Cameroon, Chad and some 36 other similar small states. Apart from a few minor arrears, this part of the budget is in good order.

However, on the special budgets for the U.N.'s Emergency Force in the Middle East and the U.N. operation in the Congo, some 50 nations have refused to contribute to either or both of the peace-enforcing operations. Among them are the U.S.S.R. and the communist *bloc,* as well as France, Greece, Portugal, Spain and many African, Asian and Latin-American states. At year-end 1963, the U.N. was still faced with arrears of assessments amounting to Rs. 71 crores, plus future repayment of Rs. 71 crores' worth of bonds. Whether a member nation which fails to pay its assessment shall lose its vote in the General Assembly, as provided in the U.N. Charter, is a matter likely to be tested this year.

Even more unsettling to the United Nations may be the influx of new members, including, in the current membership total of 113, some 58 African, Asian and Caribbean nations, many of them tiny. Nevertheless, on the principle of one vote for each nation, these politically inexperienced states can exert disproportionate influence. A blocking one third of the votes in the General Assembly, for example, can now be put together by a group of countries whose combined population is less than that of France—or by countries which together pay less than three per cent of the budget.

It is obviously educational for the new small nations to sit with the bigger older ones while international matters are discussed, but it is insanely irresponsible to insist that such states make the final decisions on the future course of human history.

On the other hand, a voting formula based on population—whereby India would outweigh the U.S.S.R., the United States and France combined—would clearly be unsatisfactory, as would one weighted according to wealth.

U Thant supports the one-vote-for-each-nation formula. But neither he nor anyone else has yet shown how the U.N. can hope to be a truly constructive force on such a footing—or how this footing can be revised.

Despite questions about U Thant's attitude on certain matters, he is a thoroughly competent administrator and, given the U.N.'s present imperfections, may well be the best man for the job.

In the U.N. U Thant has ample opportunity to observe in action communism's standard tactics of vilification, lies and obstructionism. It would seem inevitable that any thoughtful man, so exposed, would in time come to recognize—in spite of his neutralist background—that real and profound differences do exist between the two parties to the cold war.

Meanwhile, the Secretary-General should be recognized for what he is—a fair reflection of the flaws as well as the virtues inherent in the organization which he heads.



The Glory of the Grecian G...

By Robert Littell

This Olympic year, or Olympiad, is the eighteenth since the ancient Greek Games were revived in 1896 by an enthusiastic French sportsman, Baron Pierre de Coubertin. The modern Games, held in a supposedly enlightened era, vere cancelled in three Olympiads—1916, 1940 and 1944—because of the hatreds and savagery of war, while the ancient Games were celebrated in unbroken harmony for almost 12 centuries.

They outlasted both the Greek commonwealth and the Roman Empire. In every Olympic year, the Greeks stopped fighting to observe a "Sacred Truce." But whenever modern man stages a big war, the Games go out of the window together with reason and goodwill.

The ancient Olympic Games were celebrated every four years from 776 B.C., when a young fellow named Coroebus won the first foot race, to 393 A.D., when this pagan festival was suppressed by the zeal of a Christian emperor. In the confused chronology of the ancient world the Games were milestones of time. "That was the year," a Greek would say when he wanted to fix in his mind the date of some past event, "when Philokinedes won the pentathlon." The record still exists of every winner right down to the 293rd Olympiad.

Historians believe that the athletic festival in honour of the Greek god Zeus grew out of prehistoric thanksgiving ceremonies and pilgrimages to worship him at the site of Olympus. All those who came to the festival, in remote Elis, a small state on the Peloponnesus, were considered to be under the god's protection. They honoured the Sacred Truce of Olympia, which had been signed in 776 B.C. by two warring kings of Pisa and Elis.

For nearly 12 centuries the original Olympics provided a gala festival, during which the hatreds of war yielded to the demands of sportsmanship and peaceful competition

No other vow of peace made by the quarrelsome animal, man, was ever kept so faithfully. In the spring of an Olympic year, three heralds crowned with olive leaves set forth from Elis to every corner of the Hellenic world, inviting all Greeks to the festival and proclaiming the Sacred Truce. Though two or more of the many Greek city-states were nearly always at war, hostilities were suspended during the "Hieromina," or holy month of the Games. The truce guaranteed safe conduct through any part of the Greek world to any pilgrim bound for Olympia, and violators were heavily fined. Even the mighty Philip of Macedon, father of Alexander the Great, had to pay a penalty when some of his soldiers robbed an Athenian on his way to the Games.

The pious, sport-loving pilgrim would see spread before him at Olympia one of the fairest sights in all the ancient world. (Olympia had no connexion with Mount Olympus, 175 miles to the north.) In a broad, smiling valley, close by a sacred pine grove on a hill, there gleamed colonnades, a gymnasium, a luxurious guesthouse, a vast stadium between grassy banks, a hippodrome, hundreds of wonderful statues, the miniature temples or "treasuries" of a dozen Greek city-states, and, towering above them all, the temple of Zeus, with its 60-foot, stone-and-stucco Doric pillars, their capitals painted a flaming red.

The temple housed the ancient world's most illustrious statue, counted among the Seven Wonders of the World: a seated Zeus so gigantic that if in his wrath he had ever risen from his throne of gold and precious stones, his head would have gone through the roof. For the Greeks, Zeus was supreme: the father and saviour of mankind, god of the sky and the weather, the champion of liberty and hospitality; the god, in fact, of most good things, but particularly of the Olympic Games.

No athletic events were held on

the festival's first day, the date of the midsummer full moon; it belonged to Zeus. In the enclosure there was a solemn procession of garlanded judges, of official ambassadors from the city-states, bearing gold and silver offerings to the god. Through the crowd, priests led the beasts which were to be sacrificed. One by one the athletes swore, on the innards of a sacrificial pig, to behave with humility and reverence, and to play fair. Only freeborn Greek citizens of good character were allowed to compete; months earlier they had been screened for rigorous final training, including moral instruction.

During the greatest years, probably as many as 30,000 people came to Olympia—from Marseilles to the west, from the Macedonian mountains, from settlements far east of the Bosphorus, from Cyrene on the fringe of the Sahara. The presence of women was forbidden. This was not an unusual taboo in sacred precincts. Any married woman caught within the enclosure faced death by being thrown from a near-by cliff. One explanation given for this was that the sight of the trim young naked athletes would make married women discontented with their husbands.

At Olympia, as generally elsewhere, Greek athletes performed without a stitch of clothing. The Greeks despised the barbarians for being ashamed of nakedness, and mocked the Persian soldiers, stripped after capture, because they were so lily-white. Racial inheritance, constant exposure and the olive oil he rubbed on his body made the Greek athlete almost as richly dark as a bronze statue.

One can imagine the great shout that went up when the competitors ran into the stadium and peeled to their coppery skins for the first event. This was the foot race of a Greek "stadion" (606 feet), which has given its name to the "stadiums" built all over the world.

Several longer distances were run, but no marathon. This is a modern invention to celebrate the legendary feat of Pheidippides, who ran 150 miles in two days to ask the Spartans to help the Athenians against the Persian invaders. After he returned with the news that the Spartans would come he led the Athenians to victory at the battle of Marathon. He then ran 22 miles from the battlefield to Athens only to collapse and announce before dying, "Rejoice, we conquer!"

There were foot races again in the pentathlon, the other four events of which were wrestling, jumping, and throwing the discus and javelin. These five included almost everything in the Greek citizen's training for fighting that was always at close range and often hand-to-hand.

Greek wrestling was for centuries a graceful sport in which skill and style counted far more than strength. The stance was upright; tripping was allowed; the first man to throw

his opponent three times to the ground was declared the winner.

Another important event was boxing. Until the fourth century B.C., when they began to bind their hands into fists Greek boxers wore only soft raw-hide thongs bound round their fingers, leaving their thumbs free. As they were not classed according to weight, the heavyweights nearly always won. The boxers hit roundhouse rights at each other's heads, aiming at ears rather than chin or nose. They had no ring, no rounds. The match continued until one or the other was knocked out or acknowledged his defeat by lifting a hand.

Among many Olympic legends was that of a young man from the island of Samos who turned up at Olympia with long hair and purple robes. His name was Pythagoras —that same Pythagoras who years later ordered 100 oxen sacrificed, in his ecstasy at discovering that the square on the hypotenuse of a right-angled triangle equals the sum of the squares on the other two sides. To the Olympic judges he seemed so puny that they would not let him enter the boxing matches for boys. It was recorded that Pythagoras thereupon entered the men's matches—and won.

In a hippodrome south of the stadium were held frenzied, perilous chariot races, and horse races with the jockeys riding bareback. The chariot course was about nine miles —23 turns around two posts, before the first of which was a sort of altar called "Taraxippos," or "the horse-scarer." To the delight of the spectators, Taraxippos increased the bloody confusion of the several dozen four-horse chariots fighting for position at the sharp turns. Pindar tells us that in one race there were 40 casualties out of 41 starters.

In the long luminous evenings after the Games were over, there was song and feasting and oratory. The Festival of Olympia was not only religious and athletic. It was a place of assembly for the whole Greek world where men and minds could meet, poets declaim, sculptors find clients among the immense and varied throng. It was also a gigantic bazaar, swarming with merchants, pickpockets, acrobats, horse traders, jugglers, mountebanks.

Here Isocrates delivered his famous "panegyric" urging the Greeks to unite. Here Herodotus, the father of history, read aloud his realistic, entertaining chronicles of the wars against the Persians. Philosophers argued publicly in the open air; crowds gathered to hear the "rhapsodists"—literally, "those who stitch songs together." Here treaties were made, proclaimed by heralds, recorded on pillars of bronze. No ambitious politician, no statesman in search of new allies, could afford to miss the quadrennial show-window, peace conference and whispering gallery of Olympia.

The victorious athletes went home crowned with the highest honour a

Greek could win: the Olympic wreath of wild olive, cut by a young boy with a golden sickle from a tree near the temple of Zeus. Theirs was the summit of mortal happiness; on the tablets of Greek history their names would be immortally graven.

As Greek ideals and power faded, however, there began to appear more and more semi-professional trophy-hunters who went from festival to festival collecting prizes. Athletes who had been winning for Thebes or Argos would suddenly be found running or boxing for Ithaca or Athens. When Astylus, a runner for Croton, let himself be made a citizen of Syracuse, the outraged Crotonians smashed the statue they had put up in his honour and turned his house into a jail. There came a time when what the playwright Euripides had said earlier was true: "Of all the 10,000 evils that plague Hellas, there is none worse than the race of athletes."

After they had conquered Greece, the Romans kept the festival going. But in 393 the Games were abolished by Theodosius I of Byzantium, a vandalous Christian ruler who hoped "to overthrow the heathen temples throughout the whole world." Lowlier local Christians, aided by several earthquakes, completed the job, and for a thousand years Olympia vanished.

Two hundred years ago the site was found again—a malarial hollow filled with stagnant water. In 1875 the Germans, under a special treaty with the Greek Government, obtained the exclusive right of excavation at Olympia. For six years expeditions led by the great German archaeologists Ernst Curtius and Friedrich Adler bared the remains of temples buried under 16 feet of silt and uncovered such treasures as the Hermes of Praxiteles, one of the finest pieces of sculpture ever made. They were found at precisely the spot where the Greek writer Pausanias—the Baedeker of his time—said in 174 A.D. that he saw them.

Olympia today is a place of time-softened ruins, carpeted with wildflowers and gently sad. Camera-hung tourists who visit it see Greek labourers slicing into the banks of the stadium, once more working under the direction of German archaeologists. It is slow, minutely painstaking detective work, but once in a while something extraordinary comes to light: a revealing inscription on a pedestal, a beautiful little bronze horse, intact, or some other fragment of lost glory which fills modern man with awe at the greatness and the continuity of the Greek spirit, as expressed in their Olympic Games.

Saturation Point

A PLUMBER was trying to placate a woman in her flooded kitchen. "Listen, ma'am," he said, "crying only makes it worse." —A. M.

In their recent report on "Smoking and Health," the Advisory Committee to the U.S. Surgeon-General reached the same conclusion as Britain's Royal College of Physicians: cigarettes are killers

Cigarettes—America's Verdict

By Lois Mattox Miller and James Monahan

On Saturday morning, January 11, some 100 reporters entered a federal auditorium in Washington. When the Press was seated, all doors were locked (to prevent news leaks), and clerks handed out copies of a hefty, 387-page book entitled *Smoking and Health*. This was the long-awaited report of U.S. Surgeon-General Luther Terry's Advisory Committee which was expected to settle the cigarette controversy once and for all.

A glance at the report's main conclusion was sufficient to reveal that the impartial committee of medical experts had produced a blockbuster. The report stated, "On the basis of prolonged study and evaluation of many lines of converging evidence, the Committee makes the following judgement: **Cigarette smoking is a health hazard of sufficient importance in the United States to warrant appropriate remedial action.**"

Within a few hours newspapers throughout America bristled with startling headlines. The New York *Herald Tribune*, for example, presented the story under a front-page banner: "It's Official—Cigarette Smoking Can Kill You."

Damning Evidence. Summaries of the voluminous evidence supported the headlines:

• Cigarette smoking *causes* lung cancer in men. The evidence for women, while less extensive, points to the same conclusion. The magnitude of the effects of cigarette smoking "far outweighs all other factors," including air pollution.

• Cigarette smoking is the *most important cause* of chronic bronchitis; it also increases the risk of death from pulmonary emphysema.

• Cigarette smoking greatly reduces lung function. Breathlessness is far more prevalent among smokers than non-smokers.

• Women who smoke during pregnancy tend to have babies who are underweight at birth.

• Cigarette smoking is a "significant factor" in causing cancer of the larynx in men, and there is some connexion between cigarette smoking and cancer of the oesophagus and of the bladder.

• Male cigarette smokers have a 70 per cent higher death rate from coronary heart disease than non-smokers.

• While the cause-and-effect relationship has not been established, cigarette smoking is "associated" with many cardiovascular diseases, including hypertensive heart disease and general arteriosclerosis.

The ten-man committee, which included five non-smokers, three cigarette smokers and two cigar smokers, was unanimous in all its conclusions. Moreover, the conclusions parallel those of Britain's Royal College of Physicians' report nearly two years earlier.*

Burden of Disproof. Most commentators noted that the "burden of disproof" had now been passed to the tobacco industry. "The Committee," stated one editor, "has said in effect: The evidence overwhelmingly indicts cigarette smoking; if you have any other theory to explain these findings, prove it with the same quality of evidence we have found."

For once, the tobacco industry had no glib answer. The Advisory Committee not only ruled out air pollution as the chief cause of lung cancer but threw cold water on the industry's pet theory that a virus is the culprit. Said the report, **"No evidence has been forthcoming to date implicating a virus."**

The report also quashed the industry's argument that charges associating cigarettes with various diseases were based merely on "statistical" evidence. "The Committee was aware," the report stated, "that the mere establishment of a statistical association between tobacco and a disease is not enough. The causal significance of the use of tobacco in relation to the disease is the crucial question. For such judgements three lines of evidence are essential —animal experiments, clinical and autopsy studies, and population or

* See "Smoking and Health: The Doctors' Report," The Reader's Digest, July 1962.

epidemiological studies." Then all three converging lines of evidence were cited.

Animal Evidence. "There is evidence from numerous laboratories that tobacco-smoke condensates [tars] and extracts of tobacco are carcinogenic [cancer-producing] for several animal species." Seven compounds found in smoke and tars have been proved carcinogenic; other substances in tobacco and smoke, though not carcinogenic, promote cancer production. Some irritants in the smoke produce experimentally the non-cancerous tissue damage seen in heavy smokers.

Clinical Evidence. The report cited an "extensive and controlled study" by Dr. Oscar Auerbach, professor of pathology at New York Medical College, of lung tissue taken from some 1,500 men who had died of various causes. Cancerous and pre-cancerous changes in cells were found in many specimens. Later this evidence was matched with the individual's smoking (or non-smoking) history. Cancerous or pre-cancerous cellular changes "were much more common in the trachea and bronchi of cigarette smokers and subjects with lung cancer than of non-smokers and patients without lung cancer. . . . Many of the findings observed by Auerbach have been confirmed by other investigators."

Population Studies. Since 1939 numerous population studies have established the connexion between smoking and various diseases. Two types of survey, the report stated, "have furnished information of the greatest value for the work of this Committee." The first is the "retrospective study," of which there have been 29, comparing medical records and death certificates of known smokers with those of known non-smokers. "It is noteworthy," the Committee stated, "that all 29 retrospective studies found an association between cigarette smoking and lung cancer."

The second type of study is "prospective." In this, large numbers of living smokers, non-smokers and ex-smokers are enrolled. Complete histories of their smoking habits are recorded and, over the years, as participants die, from whatever cause, their death certificates are obtained for study. The Committee examined seven such studies made in Britain and the United States.

Of the 1·123 million men in the seven studies, 37,391 died during the period covered by the combined reports. The Committee found that, for all causes of death taken together, the death rate for male cigarette smokers was "nearly 70 per cent higher than for non-smokers. . . . For coronary-artery disease, the death rate is 70 per cent higher for cigarette smokers. For chronic bronchitis and emphysema, the death rate for cigarette smokers is 500 per cent higher than for non-smokers. For cancer of the lung, the most frequent site of cancer in men, the

death rate is nearly 1,000 per cent higher."

The Filter-Tip Question. To the dismay of the tobacco companies, the report made no findings on the filter-tip cigarettes (which account for nearly 60 per cent of American cigarette sales). Later, Surgeon-General Terry explained: The Committee believed it had insufficient evidence as to the effect of various filters. Since not all the substances in tobacco smoke which have adverse effects on health are yet known, it would be impossible to know whether a given filter might permit the passage of hazardous substances. He admitted, however, that it would be "erroneous to conclude that cigarette filters have no effect."

Asked if "standardized research" on the effectiveness and selectivity of filters, as well as additional research on the components of smoke would not be desirable, Dr. Terry answered, "Yes, unquestionably." The Committee felt, he added, that "the development of better or more selective filters is a promising avenue for further research."

In presenting the report, Dr. Terry promised that there would be "no footdragging" by the U.S. Government. "We will move promptly to determine what remedial health measures the Public Health Service should take." The exact nature of the "remedial" measures probably will be left to a second advisory committee.

The U.S. Federal Trade Commission (FTC) announced that it was ready to take action in its field. On January 18, it issued a set of proposed regulations which, among other things, would require every cigarette advertisement, packet and carton to carry this warning: "CAUTION—CIGARETTE SMOKING IS A HEALTH HAZARD. The Surgeon-General's Advisory Committee on Smoking and Health has found that cigarette smoking contributes substantially to mortality from certain specific diseases and to the overall death rate." A shorter warning was designed particularly for television commercials. "CAUTION—Cigarette Smoking Is Dangerous to Health. It May Cause Death from Cancer and Other Diseases."

When the Surgeon-General's Advisory Committee was formed in July 1962, the American tobacco industry welcomed the project and hoped for a "comprehensive review" of the evidence. But when the report was published, the president of the U.S. Tobacco Institute, George Allen, commented on a remark which Dr. Terry had made at an informal press conference: "As Surgeon-General Terry pointed out, 'There is a great deal yet to be known on the subject.' In short, this report is not the final chapter."

No one disagrees. Indeed, the president of the American Cancer Society, Dr. Wendell Scott, said of the report, "More research is needed

to determine what constituents in cigarette smoke are responsible for lung cancer, how these cancers develop, and whether these constituents can be eliminated." Responsible health officials, however, are unwilling to suspend judgement and sacrifice lives until the "final chapter" is written. Dr. Scott commented, "It is essential that action be taken immediately to make use of the information in this report to reduce the tragic and unnecessary toll of deaths caused by cigarette smoking in this country."

The U.S. tobacco industry, for more than ten years, has demanded "more research" as a delaying tactic against every authoritative study of cigarettes and disease. But from now on its propaganda, aimed at confusing or beguiling the public, will be subordinated to high-pressure politics. The objective is to delay or kill anything that might hurt cigarette sales—specifically the proposed FTC regulations.

Politics *v.* Human Life. "The smoking report can hardly be kept out of politics," a New York *Herald Tribune* editorial commented, "but the immediate tendency of tobacco-state politicians to rise up in defence of cigarettes and to question the report's findings is a sorry commentary on their concern for human health or life."

The tobacco industry is desperate, not only because of what may be lost in sales, but because far more may be lost as a result of damage suits brought against the cigarette companies by victims of lung cancer who smoked a particular brand, or by the victims' survivors. Five cases have already gone to trial, many more are pending. The legal point at issue is the "implied warranty" that cigarettes are safe to smoke because the manufacturer does not state otherwise.

In one case (Green *v.* The American Tobacco Co.) the court held that Green's two or three packets of Lucky Strikes a day probably caused the lung cancer which killed him. However, the court refused to award the 1·5 million dollars in damages sought by Green's estate, and the U.S. Court of Appeals reversed the verdict and ordered a new trial.

The cigarette companies are aware that they are in for trouble and that the Advisory Committee's report may hasten it. Says Edward Bloustein, professor of law at New York University, "Unquestionably it will carry great weight with jurors."

Ironically, the warning which the FTC would put on labels and in advertisements would, in the opinion of legal experts, probably relieve the manufacturers of such liability in the future. Yet the industry hesitates to make the admission, and will probably fight to the bitter end.

In the last analysis, most observers agree, the issue of whether to smoke or not to smoke must be decided by each individual.



My Stand Against Smoking

One cigarette is just as dangerous to an ex-smoker as one drink to a reformed alcoholic

By Courtney Ryley Cooper

THE SCENE is deeply etched. It was a lazy afternoon; on my studio floor snored my terriers, the Four Barx Brothers. All in an instant I whisked away a lighted cigarette and said aloud: "No; I've stopped smoking." Here was the culmination of many years' resolutions, each too weak to stand by itself, but all forming a basis for Cooper's Last Stand. Now I must either defeat the foe or admit to being a weakling.

Suddenly I was terrified—a snivelling sacrifice on the altar of resolution. It was the kind of afternoon for a fellow to lean back from his typewriter, forget his work for a moment and light a cig — But I had sworn off.

This article first appeared in The Reader's Digest for July 1940

My smoking had got a bit much. For more than 40 years I had sucked up nicotine like a filling-station sponge. Even at night I woke up many times and grabbed for a cigarette. And now I stood quivering with the knowledge of what I was in for. I had no help; my wife was out shopping. I was alone—

Alone! I laughed. No need to tell anyone what I had done. No need for braggadocio, or alibis in case I couldn't stick it out. If I failed, there would be no shame. Nobody could kid me into weakening, because nobody knew.

Suddenly everything was fine. Deliberately I put some cigarettes in my pocket; that afternoon I fingered them a hundred times. At last I laid them aside. I had lived for eight hours without smoking. Why shouldn't I be able to live eight hours more? I refused to touch my cigarette box when I went to bed. Somehow I managed to sleep, only to awaken with a horror hanging over me—of something terrible I'd done—

Then I heard the clock strike four. I'd been asleep for six unbroken hours, something unheard of for years! My terror passed; now I really laughed. Switching on the light, I opened the box and streamed cigarettes through my fingers, exulting over them. "I've got you beaten!" I gloated. "If I can stay away from you as long as this, I can stay away for ever."

Here the story stops short. On that November day when the Big Excitement happened I was 20 pounds underweight. I had no taste for food. I had smoker's throat, a bronchial cough, smoker's nerves, sinus, and spine—about as rigid as a rubber band. The fingers of both hands were stained a deep walnut. I was ashamed to open my mouth because of the thick nicotine encrustations on my teeth, to say nothing of the brown fur on my tongue. I was a one-man furnace.

A single month brought about a great change. My smoker's pulse, which had often pounded along at 120, dropped back to a pleasant 72. I could really taste and enjoy food for the first time in ten years. The smoker's throat, cough and sinus inflammation were gone.

Today if I don't sleep for eight hours at a stretch, I complain about it. The only scar remaining is the wish that I'd done all this years ago.

I had attempted it often enough, but without the proper philosophy. Usually I told everyone that I was going to *try* to stop smoking. Or I began the "tapering off" technique, and all that self-delusion bilge. In a few days I was smoking like a fire-engine again. How anyone afflicted with acute nervous nicotinitis can cut down on his intake is something I've never learnt. On the contrary, everybody who has studied the problem of smoking avers that there is only one way to decrease the intake —and that is to stop altogether.

J. C. Furnas, in an exhaustive canvass of smokers, found that either you'll cut smoking off short and take it on the chin or you won't cut it out at all!

From 45 of my acquaintances who have sworn off, I have discovered some rather surprising things. Those who experienced the least difficulty in giving it up were those who did the least talking about it. As one friend put it:

"If you're going to build bridges back to smoking even before you give it up, then giving it up is just a pretence. You're going to lay off for a while, go through hell and high water, start smoking a little on the sly, then get back as hard as ever, meanwhile lying your head off about how you really found out it was better for you to cut down gradually."

One cigarette is just as dangerous to an ex-smoker as one drink is to a reformed alcoholic. Actually, excessive smoking is just a form of drunkenness. If I had a boy whom I was trying to guide, I'd tell him to take the alcohol route rather than the tobacco road. Your doctor can scare you into giving up drink. But most doctors will only say about smoking: "Well, perhaps you'd better cut down."

Yet there exists no doubt about the benefits to be derived from cutting out tobacco. Of my friends who have stopped nibbling at nicotine, all but two or three are feeling far more fit. Headaches have vanished, sinus troubles decreased. In some instances, sight has been enhanced; others mention a keener sense of smell, even of hearing. With many, there has been a lessening of indigestion and biliousness, and a greater resistance against colds or flu. Smoker's throat and cough have disappeared. While some have gained weight, most have not gained in size.

Since I stopped smoking, I have gained 20 pounds, and can drool easily at the thought of oysters, a sirloin steak, baked potatoes and ice-cream. Yet I still wear the same size clothes.

This is probably due to an increased desire for activity. A person feels better, and goes in for more exercise. The type of flesh which one puts on by abstinence from smoking seems entirely different from the inner-tube variety which attaches itself to the midriff as a result of indolence.

There is a common belief that a drink isn't much good without a smoke to accompany it. Therefore, one big hurdle is the social hazard when everyone is standing about with cocktails in hand. You think you're not going to be able to take that. But it can be done. Merely say what you've always said when you haven't felt like smoking: "No, thanks." The offering of cigarettes is merely a mechanical social gesture. It is amazing how few people notice that you aren't in the huffing and puffing class. One rule

need be observed here: Always carry matches. Oddly enough, the more cigarettes you light for others the fewer times you will be asked to smoke.

Heavy smokers become accustomed to irritation of the throat and some sort of taste in the mouth, and my friends agree that this is the big thing to beat in staying away from tobacco. In times of stress, I sucked a menthol cough drop or mint. Others have used boiled sweets. But stay away from chocolates; you'll eat the whole box before you realize it.

The person who stops smoking must inure himself to the knowledge that every old association will bring a recurring desire. Once this is understood, however, it is just another apple in the bag. The desire *can* be stifled by a compensatory amount of reasoning which makes the craving ridiculous. This phase grows weaker the more you laugh about what a nuisance smoking used to be. Soon the thought of smoking seldom enters your mind.

One association will not bother you: the smell of cigarette smoke. Indeed it has the opposite effect; the longer one stays away from tobacco, the more obnoxious it becomes. The exhalation from another's cigarette stinks like a dead cat, and revives no memories except unhappy ones of headache, hacking coughs, a half-dead feeling, and hours in which you sat cursing yourself for being able to do nothing but suck on a tube of tobacco.

Always remember this: No one ever died or went mad from lack of tobacco. The worst that can happen to you is annoyance, for which you are repaid by better wind and pulse, and a mouth which doesn't taste like glue.

To stop smoking is a real job, but it is not as sacrificial as one likes to pretend. I wish I could assume gigantic stature and stand, Napoleon-like, with a hand in my waistcoat while I relate terrible experiences. But I can only say that, like any other abrupt change, giving up smoking is serious, but not crucial. One must employ every possible element of one's sense of humour, whip up all the pride that ever existed—and use common sense. After all, why fuss and worry about something that enables you to wake up rested in the morning, restores your mental clarity and adds years to your life by decreasing your chance of physical breakdown?

An overwhelming desire for a cigarette is possibly sweeping over you at this very minute. But why should a puny piece of paper with some tobacco inside it be allowed to order you about?

WHENEVER you see a man with a handkerchief, socks and a tie to match, you may be sure he is wearing a present. —G. H. B.

The Netherlands, exporter of bulbs to the entire world, is transformed each spring into a garden of glowing colour

When It's Tulip Time in Holland

By James Winchester



ONCE UPON a time, King Chosrow of Persia and a young man named Farhad both fell in love with a beautiful princess, Shirin. To remove his rival, the king ordered him to chisel a channel through hard stone, and while Farhad laboured at this task, the king married Shirin. When Farhad heard the news, he killed himself. Each drop of his blood that struck the ground burst into a magnificent flower—a tulip.

Tulips still grow wild in Iran and in Turkey, and are the latter's national flower. But today the real home of Farhad's legacy is, of course, Holland. First imported in 1562 from Turkey, tulips are as much a symbol of The Netherlands as the windmill. Each spring more than 30,000 acres are covered with a profusion of bulbs in bloom—crocuses, graceful narcissi and fragrant hyacinths, but most of all the magnificent tulips in colours from pure white to almost black, softest pink to deepest purple, salmon hues to brilliant reds. More than 4,000 million of these bulbs are exported from Holland each year to some 125 countries. One-third of them are tulips, a Rs. 12 crores-a-year trade involving 8,000 growers, 800 exporters and 24,000 workers.

Showcase for the Dutch bulb

"Texas Gold." The name "tulip" comes from a Turkish word for turban. The original tulip blossom resembled an upside-down turban

growers is the 62-acre Keukenhof Gardens near Lisse, which celebrates its fifteenth anniversary this year. Here more than 1,500 varieties of tulips are on display. The gardens, where you can look and place your order for next season's bulbs, are a favourite with foreigners and Dutchmen alike. Flower-lovers may look up to find Queen Juliana herself standing near them. She is a frequent visitor to Keukenhof.

Nearly 700,000 visitors pay two guilders (Rs. 3) each to see Keukenhof during the eight weeks the gardens are open, from late March to mid-May. Most bring along their cameras—Keukenhof's flowers are among the most photographed in the world.

Visitors, sometimes 60,000 a day, often react with almost reverent awe to the floral loveliness. "They rarely even touch the flowers," reports Bram Warnaar, a Keukenhof official. "We have not had a dozen blooms picked or stolen in all the years we've been open."

About 150 breeds of tulips are exported in volume from The Netherlands. To the Dutch, a commercial bulb is one that earns Rs. 48 lakhs a

A stunning profusion of "Franklin D. Roosevelt" (in some areas called "Teddy Roosevelt") Darwin Hybrid tulips on display at Keukenhof Gardens



PHOTOGRAPHS MALAK OF OTTAWA



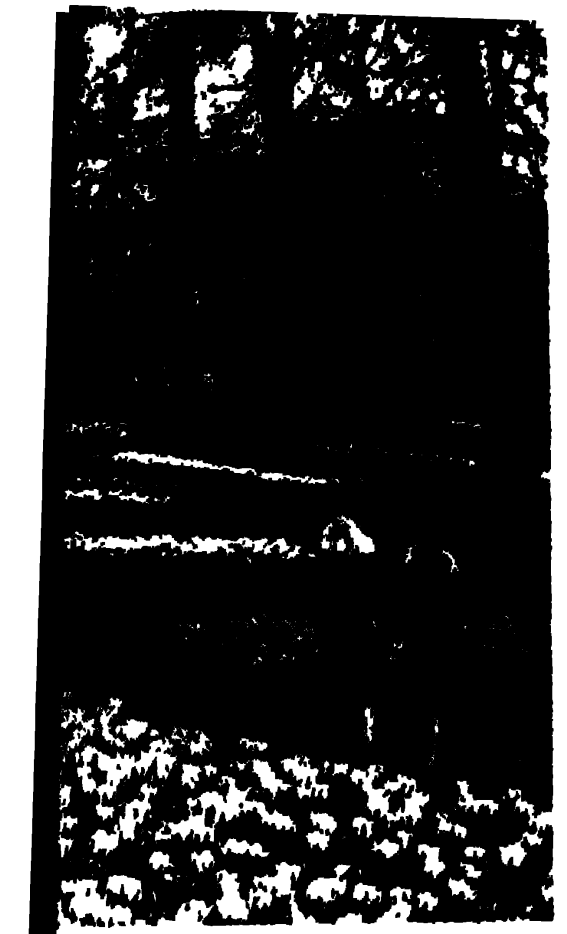
"Red Parrot." Among all tulip breeds, red is still the most popular colour. However, the search goes on for the exotic, such as an all-black flower. A true black tulip has not yet been achieved, but some amazingly dark colours have been created

year or more. Typical is a Darwin Hybrid, known as "Apeldoorn," with a solid red flower and 24-inch stem. First introduced in small numbers in 1940, with single bulbs selling for Rs. 190, more than 100 million will be sold outside Holland this year at an average price of Rs. 0·5 a bulb.

Some popular varieties are descendants of the original wild tulips, but most are new varieties, bred either through hybridization or by natural mutation. In hybridization, two or more varieties are deliberately crossbred, the pollen from one flower being artificially transferred, under greenhouse conditions, to the pistil of another. Mutation, which produces a large number of variations, is an accident of nature—the sudden appearance, for instance, of a white-blotch on the flower of a previously solid-red variety. Either way, the grower needs infinite patience. It takes a quarter of a century of planting and replanting before a new variety, breeding true to



Severed flower heads on their way to the spring flower parade; an idyllic scene which lures flower devotees and camera enthusiasts from all over the world



Fifteen years ago the Keukenhof (meaning kitchen garden) area, once used as a German V-bomb launching site, was transformed into a brilliant spring show of Holland's most famous product

form, is ready for competitive marketing.

Before the war, chief demands were for solid colours. Today, speckled, two-toned, oversized and off-shaped tulips are growing in popularity.

Typical is the "First Lady," a Triumph tulip of reddish violet and flushed purple. A *Tulipa fosteriana,* "Holland National"—a very bright orange-red blossom nine inches across—is expected to attract much future acclaim. Only 1,000 are in existence, each valued at Rs. 2,400. It will be ten years before there can be enough cultivated for general sale.

The Dutch no longer enjoy a virtual monopoly in tulips. Japan has built up a large tulip industry from scratch since the war. Denmark now grows three-quarters of its own tulips, and both France and the United States are increasing their commercial growths. Russia, too, is active in tulip breeding and is reported to be spending more on



Tulipa clusiana, *often called the "Peppermint Candy" tulip. One of the many direct descendants of Asian tulips, it has undergone no change since it was first imported into Holland more than 200 years ago*

research than the rest of the world put together.

Still, Holland will sell about 200 million bulbs in Britain this year. West Germany is an even bigger customer, and Sweden, with only 7·5 million people, will buy about 150 million bulbs. "We sometimes think they eat them," Harry Hylkema, a Hillegom grower, reports happily.

Centuries of experience have taught Dutch growers how bulbs can be handled and planted to achieve the best results in home gardens.

First, the later you buy your tulip bulbs in the autumn the better, because the bulbs have had longer to "cure" and thus gain more form and strength. Once bought, the bulbs should be put in the ground without delay. They can be planted in almost any kind of well-drained soil, at any time between the beginning of autumn and the first heavy frost.

No artificial plant food or fertilizers are needed. The bud, from which the flower grows, is already formed within the bulb. It has only to be protected from deep frost. This is best done by covering the plantings with a layer of peat moss or straw.

Six to seven inches below the surface is the best depth to plant long-stemmed tulips, four to five inches for shorter-stemmed varieties. Normally roots are down in eight to ten weeks. The ground should be kept slightly moist for the first few weeks.

In early spring, as the buds begin to come through the ground, protective covering should be removed. Full bloom takes place from four to eight weeks later, depending on the type of tulip. The ideal spring temperature for good tulips is between 50 and 60 degrees Fahrenheit (10 and 15 degrees C.) for the period when the bulbs are in bud. If it is hotter than that, the buds open too quickly, resulting in small flowers that don't last.

Tulip bulbs, say Holland's experts, should be dug up after the foliage has died down. They can be replanted the next season, but after that they begin to fade. Replacing them is not expensive. "Four guilders [Rs. 6] a dozen is a safe price for the average tulip bulb," say the Associated Bulb Growers of Holland.

Patterns of the beds should be changed annually, and at least 100 tulips planted for the best display. Ten tulips each of ten different varieties, planted in clumps rather than straight rows, give the best effect.

Losing Game

A FELLOW boasted about his foolproof reducing diet: "I never eat while my wife is talking." —E. W.



Dominating the colossal spine of the Andes, this "Father of Mountains" is an irresistible and often fatal lure to climbers from all over the world

The Challenge of Mount Aconcagua

By Leland Stowe

THE WORLD'S highest mountain west of the Himalayas and the Soviet Union remains virtually unknown—except to climbers, over whom the Argentine's Mount Aconcagua has long exercised a magnetic, sometimes irresistible spell. At a skyscraping 22,835 feet, this peerless monarch of the Western world outsoars lofty Mont Blanc by a mile and a quarter. In part its unique lure resides in its solitary eminence as the Top of

America. But the "Sentinel of Rock"—as pre-Incan Indians first named it—poses an even greater challenge in its diabolical and insidious character. A siren in ice-masked volcanic rock, looming awesomely above the near-by Chilean border, Aconcagua dominates a galaxy of South American giants. From Colombia, Peru, and Bolivia southward, the Andes' colossal continental spine, the earth's longest unbroken mountain chain, erupts into more than 20 peaks exceeding 20,000 feet. They reach a zenith in this "Father of Mountains."

Since Swiss alpinist Mathias Zurbriggen first conquered Aconcagua in January 1897, scores of dauntless climbers have assailed its bastions, with some 50 reaching its summit. But nearly half as many perished in their attempts. For the Rock Sentinel's formidable array of climatic defences is perhaps unsurpassed among the world's mightiest peaks. Indeed, alpinist authorities rate parts of Aconcagua's South Face ascent as "Class Six," the world's most difficult.

Even in South American summer, from December until March, upper Aconcagua's steady sub-zero temperatures repeatedly plunge to 35 or 40 degrees below zero. But abnormal atmospheric perils also wreathe its ramparts. Warm Pacific air frequently collides with glacial currents, generating without warning blinding blizzards and hurricanes of 100-m.p.h. velocity. In such rapacious gales, mountaineers have been whipped from precarious cliffs like matchsticks.

Demonic electrical tempests sometimes sear its naked cliffs. Chilean climbers once miraculously survived lightning javelins which struck all round them at five to 20-second intervals; sparks showered off their glove-tips and burst in clusters only a few feet from their heads.

Soroche, or altitude sickness caused by lack of oxygen, constitutes another menace. Usually *soroche* afflicts climbers with acute nausea and vomiting, or with brain-stunning headaches and dizziness. But it may incite sudden mental derangement. Smitten by loss of rationality, victims often start to wander off, heedless of gaping crevices and precipices, sometimes shouting or singing incoherently. Many are never seen again. Under such a maniacal compulsion, Father Kastelic, a Yugoslav priest, obsessed by a determination to affix his bronze crucifix on the summit, attempted to climb the upper crest in a roaring sub-zero blizzard alone—without pick, coat or gloves! His frozen body was found a year later.

This *soroche*-bred lunacy prompted Andeanists long ago to nickname Aconcagua "the mountain of hallucinations." Weird visions have repeatedly driven climbers to mad abandon and to doom. One Argentine climber suddenly perceived a human head bobbing in the mist a few yards ahead of him. For 20

minutes the bodiless apparition enticed him onward. Then it faded away to be replaced—on heights above 19,000 feet—by a caravan of ox-drawn carts which, he became convinced, was leading him to the summit.

Aconcagua's climatic furies have taken the lives of a distinguished list of climbers.

Captain Basil Marden, of the 9th Lancers, launched a mid-winter climb —*alone*—in July 1928, calmly declaring, "If I do not return, send no rescue parties." He was killed in an avalanche.



Paradoxically, the mountain's powerful sunshine, rare as it is, can also be fatal. In 1936 Newell Bent, from Massachusetts, for the sake of comfort, ignored local veterans' warnings and climbed all day stripped to the waist. He became feverish, and three days later died of sunstroke. His tombstone stands with those of other martyrs at Aconcagua's foot.

None of Aconcagua's victims was more indomitable in spirit than the renowned Juan Jorge Link, a four-time conqueror of the peak. As if infatuated by the mountain's challenge, Link launched his last assault in February 1944, with several companions and his wife, Adriana Bance de-Link, then the only woman to have breached Aconcagua's crest.

They reached 20,336 feet when 22-below-zero blasts imposed such agonies that two turned back. The Links, accompanied by Alberto Kneidl, defied a fast-rising tempest to renew their summit attempt and were imprisoned by a "white hurricane" of terrible ferocity. For three days and nights the elements raged incessantly, and two subsequent rescue searches, made at supreme risk, revealed no sign of the trio. The bodies were found the following year, at the foot of a rocky slope.

Over the years no assailant of the icy fortress had suffered such cruel and repeated "heartbreakers" as Dr. Walter Schiller, a German geologist whose attacks on America's rooftop extended over a 38-year span beginning in 1906. Caught the following winter in a savage blizzard at close to 18,000 feet, the great Andean explorer plunged into a crevice. One leg was wedged under a rock, his head and shoulders hung several feet lower. In this plight he dangled

for hours. Suddenly he heard voices. Desperately he rallied his ebbing strength and kicked slowly with his free leg. That wigwagging flutter caught the astonished eyes of muleteers accompanying a Dutch expedition, who rushed to release what looked like a deep-frozen mummy. Schiller recovered to wage his relentless contest with Aconcagua.

"Death on a mountain is the most beautiful," Schiller once wrote. There seems a kind of mystic inevitability in the fact that in 1944 "the most beautiful death" came to Schiller—then 65 years old—on the mountain which had been his lifelong obsession. Upon finding Schiller's body, searchers commented on the remarkable serenity of his features. In the words of Lieutenant-Colonel Orlando Mario Punzi, Argentine Andeanist and co-author of *Historia del Aconcagua,** "The sleeping lover of Aconcagua seemed dreaming of the impossible victory which had eluded him."

For every tragic tale of defeat in Aconcagua's history, there is a triumphant story of victory. One of these began in January 1954, when a group of young French alpinists, led by René Ferlet, astounded veteran Andeanists by announcing their determination to scale the South Face. "It's impossible!" they were told. For nearly 60 years Aconcagua's South Face—whose ascent is climaxed by a wall, rising over 8,000 feet at an average 50-degree inclination—had remained invincible, written off as impregnable.

But nothing could dissuade the French mountaineers. Although himself shortly eliminated by sciatica, Ferlet had recruited teammates who were in the front rank of young French climbers: Guy Poulet, Lucien Berardini, Robert Paragot, Pierre LeSueur, Edmond Denis and photographer Adrien Dagory.

Moving food and equipment, it took nearly a month to establish a camp near the base of the wall, over 14,000 feet up. They assailed the wall's base on February 21, and that night, at 15 to 30 degrees below zero, slept like bats in a niche on the precipitous face.

On the second day they battled for 13 hours—to ascend less than 900 feet! Next day progress was still desperately slow. One glaring ice-wall succeeded another. Painfully they alternated at chipping out precarious footholds and fixing ropes on crags or metal pins. At each halt on a tight shelf, their lungs on fire, they leaned their heads on their ice-axes or forearms. Ultimately, however, they reached a providential crevice at 19,000 feet where they could sleep. Still, the most horrendous cliffs reared above them, and the remaining 3,000 feet were barricaded, high up, by the wall's outjutting, death-fringed eyebrows.

February 24 broke with whirlwinds of snow whipping round them and round the mountain's

* Published in Buenos Aires, 1953.

dome. As they crept tenaciously upward, near-gale gusts tore at their ropes; hands grasping icy rock froze inside their gloves. Then a curling lip of glazed rock, projecting outward from the rim of an almost vertical, 60-foot slash. mesmerized their gaze—the infamous "balcony," the wall's most terrifying bastion!

Rope-linked to Guy, Lucien started upward. But after painfully hacking out a dozen niches his shoulders sagged. "I have no more strength," he panted.

"Rest a little," Guy urged. For ten minutes they clung to their dizzy perch. Then Lucien uttered one word: "Ready."

Up and up they edged, driving pick-holds and cutting foot notches in the glazed ice-face—inch by inch and foot by foot, until the balcony's under lip slanted outward with nothing but space beneath. For what seemed a suspension of time they clung there, marshalling every dwindling force in half-frozen bodies.

At last Guy turned his blanched visage towards his partner above. "Lulu," he warned, "it is necessary to pass!"

"Don't worry," declared Lucien firmly. *"I am going to pass!"*

But could he possibly retain his balance while leaning outward far enough to drive a solid pick-jab into the ice-coated lip? Ah! An unbelievable thumb of rock thrust upward from its rim. Lucien's tossed rope encircled it. He drew the rope tight, and it held! That rope meant life—or death—for all.

Tilting backward and then swinging out into space, dangling like a thread-suspended spider, Lucien pulled himself upward in a heart-stopping gamble. As Guy and the others below watched breathlessly, he hung for seconds on the eyelashes of Kingdom Come. Then, slowly, slowly, Lucien's head and shoulders slid out of sight over the frozen lip. His legs thrashed frantically against the sky, then flopped in abbreviated jerks, and the skyline was empty again. Soon Lucien's triumphant voice rang out, "I'm here! You can come now." With his steadying leverage from above, all five swung and twisted over the death-rimmed bulge. The balcony was vanquished! But the crest was still ahead.

How each in turn—with freezing, near-senseless hands—manoeuvred that petrifying outward-and-upward contortion remains miraculous. "My heart was pounding," Guy later confessed. "My fingers were as crisp as a bird's claws."

To climb the last 60 feet had taken them *five hours!* After they slashed out a precarious ice nest in a minuscule balcony crevice Lucien held out his arms. "My hand!" he cried. "I am going to lose my hand!" His left hand was deep purple, swollen to twice normal size, covered with huge blisters. His comrades' frostbites were nearly as terrible—harbingers of amputations

or possible death from gangrene. With doom-spurred energy they beat one another's limbs again and again, then crawled into sleeping-bags.

Under a rarely beneficent sun, the six Frenchmen resumed their assault on the morning of February 25. By late afternoon they neared the crest. Amazing sunshine sprayed the glittering magnet above them. Gale-fanged winds lashed their bodies, but together, on faltering feet, Guy and Lucien staggered upward over the rocky slope to the azure-limned summit. Before them stretched Aconcagua's rude "platform"—the top of America!

"Look—where we have come!" gasped Lucien. "It's the first ascent of the South Face!"

The price of the conquest proved cruelly high. In hospital for nearly three months, five of the six French climbers suffered amputations of fingers or toes. But to Andeanists everywhere, their triumph remains as imperishable as the Rock Sentinel's implacable face. "It was one of the outstanding mountain-climbing exploits in history," declares Chile's Dr. Humberto Barrera.

Why do men continue to challenge Aconcagua's furies? The British climber, George Leigh Mallory, who died in an assault on Mount Everest, was once asked why he wanted to climb that great mountain. "Because the mountain is there," he said. Aconcagua, with its unreckonable, untameable climatic demons, will always be there—and so will there also be men to climb it the hard way.

Common Market

PEOPLE IN Spain are buying car licence plates from Florida and Virginia, thereby acquiring tourist privileges in their own land. Yankee manners abroad must be improving if the natives no longer fear being mistaken for Americans. —*C.P.D.*

MOST travellers have encountered the omnipresent "Made in Japan" label at one time or another. It can be found on "German" beer mugs, "Red Indian" moccasins, even "Eskimo" carvings. But business is a two-way street. This was proved out East a few months ago. Japanese officials protested the distribution of "genuine Japanese silk kimonos." The labels proudly proclaimed: "Made in Brooklyn." —*M.J.*

ON A RECENT trip to Italy a tourist visited a shop in Rome which advertised hand-made shoes. He was so impressed that he bought six pairs. When he unwrapped the package in his hotel room, he found a slip in one of the shoe boxes. It read: "Made in Hong Kong from American lasts for sale in Italy." —AP



My Own Personal Patron Saint

By Jane Trahey

GULLIBLE, gauche, call it what you will: until I was 12 years old I believed in all they said about St. Nicholas. Eventually Mama had to sit me down and tell me there simply was no Santa Claus. This dismal news created for me a spiritual vacuum. I could accept St. Nicholas's yearly mistakes; he had millions of little girls and boys requesting dolls and trains and bricks and mink coats, and if *he* got confused there was always hope for next year. But now that I knew it was Mama who was dumping slips, pyjamas and old bird books in my stocking, my mood was bitter. I had to find a saint guaranteed to be my own.

When answering a maiden's prayers, Polycarp has proved himself an absolute angel

Thus I started my peculiar habit

Condensed from Harper's Bazaar

of talking to saints. Their ministrations have equalled for me, and in many ways transcended, pep pills and tranquillizers. Everywhere—at meetings, in taxi-cabs, in aeroplanes, in family squabbles—I find these divine, invisible allies invaluable.

From the beginning there seemed no point in trying to get in touch with saints who are obviously too busy.

Take St. Anthony of Padua, who is concerned when something is lost. Just try to see his work as a whole: multiply all the Catholics in the world who've misplaced something by all the High Episcopalians in the same boat; put this on a daily basis, and you can visualize St. Anthony's compound in the clouds as something very close to a James Bond operation. He has hundreds of detective angels that do nothing but poke around the world looking for lost umbrellas, keys, wallets, watches, budgerigars and people. Seeing what a tedious job it is just to find the belt for a dress, or something in the bottom of your handbag, you can imagine what a 24-hour-a-day, 365-days-a-year pray-and-find-it-service must be like. No 40-hour week for St. Anthony!

Then there's St. Christopher, who devotes himself to travellers and whose medal one wears or has in the car. Heaven knows *he* has a thriving business. Even the dashboard of Morris Rosenblum's taxicab dangles a St. Christopher medal like a rabbit's foot. Can you imagine what four-day week-ends must be like for *this* saint? No, your best chance of having your prayers heeded quickly depends on getting one of the more obscure saints into your life as fast as possible.

It was because of Dr. Hoenig, my biology teacher, that I found the saint of my life. Polycarp. I had fallen madly in love with Dr. Hoenig—I have always fancied the impossible. For days I sat and stared at him with half-moon eyes. I tried to hold my lips as Garbo did hers in *Mata Hari*. The result was that Dr. Hoenig had me switched to Sister Mary William's class.

My acute depression decided me—I'd had enough of frog dissection for that dismal day. I would go to the library. Sister St. Polycarp, who taught Shakespeare, looked over the top of the London *Times* and adjusted her pince-nez.

" 'Oh grey day, of molten mist,' " she recited. "What's the matter, my dear?"

"I'm hideously depressed," I said. Then, doing a bit of theological brain-picking: "Is there any saint you know of in charge of the hopeless?"

"Well, there's St. Jude," she said. "But if I were you I'd try Polycarp."

Of course there *would* be a

JANE TRAHEY, head of an advertising agency, is the author of "Life with Mother Superior," which appeared as the book supplement, "Culprit in the Convent," in The Reader's Digest, December 1963.

St. Polycarp, or why else would there be a *Sister* St. Polycarp?

"Is he any good at unrequited love?"

"My dear," she said, "Polycarp is fantastic at whatever he does. Of course, I am going on the assumption that it is not a sin you're engaged in, and/or arranging for."

Dr. Hoenig was not married; therefore I felt I could assure Sister that the request for promotion to this blissful estate with him would get the Good Heaven Seal of Approval. She grasped my arm: "Remember, he's not a popular saint, and you mustn't get discouraged if you don't reach him at first."

Sister was right, contacting St. Polycarp was not easy. I tried the prescribed times: at Mass in the morning, in bed at night. I tried the formal approach, such as, "Dear St. Polycarp, you don't know me . . ." (and then I'd enclose a résumé). That produced nothing. I began to envisage him as a dyspeptic old man, living out in the country, extremely deaf. One could send up all the wires one wanted and his old housekeeper (a lady angel) simply tucked them in her cumulus apron and forgot them.

"Sister," I said one day, "I'll keep working on St. Polycarp, but perhaps you know of someone else equally good but not so obscure?"

She looked piqued. Evidently she didn't like having her No. 1 contact belittled. With a note of seriousness she said, "I'll help you. I'll pray for your intention—and it had better be a good one."

Two days later, Dr. Hoenig announced his acceptance of a new post, got married, and went out of our lives. It was most certainly an answer to my prayers—if not the one I wished. But it began my long and constant push to establish contact with St. Polycarp.

First, I read up his background—the least I could do if he was going to get this key post in my life. St. Polycarp had been a bishop of Smyrna and a disciple of St. John. He refused to deny Christ and was condemned to death. They were going to chain him to the stake but he said, "Leave me as I am!" When the flames licked the old man without burning him, his persecutors were forced to stab him on the pyre.

Well, I thought, *he* certainly must be fascinated with the life and love of Dr. Hoenig. I realized it would be courteous to screen my petitions. For now, besides my mental pictures of St. Polycarp getting up, donning his bathrobe, adjusting his glasses and rubbing his arthritic elbow, I could invariably hear him saying, "Oh no, not again. What have I done, after all I've been through, to get *her*?"

However, when you do eventually establish rapport with the Bishop of Smyrna, you can count on him. I shall never forget how breezily he got me that important job. And then there was that little trip in a Piper Cub in the Rainy Lakes area

of Canada when it grew dark long before we got down. Oh, I have no complaints about St. Polycarp's performance.

Since Polycarp and I became fast friends, I have been stubbornly loyal to him. Of course, I always have a few saints in reserve in case he gets fed up with me. St. Apollonia is awfully good for teeth; and if there is a saint who understands a hypochondriac, it's St. Theodosius the Cenobite, who lived to be 105. St. Bernard of Menthon used to be awfully good until the ski rage began a few years back; now he's almost as busy as Christopher. And I once tried to get in touch with St. Solange, as she is in command of general calamities. But I can't honestly say there's ever been a substitute for Polycarp. No matter what saints I try, I invariably go back to him.

I do hope this press agentry will not upset my Polycarp's apple-cart. Lord knows, I have no desire to distress him. I've lived off St. Polycarp, in a manner of speaking, for almost 20 years. But it's like a dentist or a good delicatessen or a superb book that you simply cannot resist recommending to a friend.

Well, even if there is a run on my favourite saint, I still have a good eight years' start. It seems to take that long to establish real rapport with anyone from the first century.

Behind the Screen

ONCE at the Fox studios David Raksin, talented composer of Hollywood musical scores, was being teased by a couple of secretaries about the fact that the picture on which they were working was successfully dispensing with all music.

"Why," asked Raksin, "do the producer and the director feel this picture should be without music?"

"It all takes place on a lifeboat," said one girl, "and it's miles out on the ocean, so where could the music come from?"

Raksin said: "You just go and ask Alfred Hitchcock where the camera comes from, and I'll tell him where the music comes from!"

—Leonard Feather with Jack Tracy, ***Laughter from the Hip***

FILMING outdoor shots for a Western film, director John Rich had to reshoot one scene seven times because of such extraneous noises as yelping dogs and jets flying overhead. A passing woman motorist stopped to watch, and interrupted the director to ask, "Why do you persist in shooting the same scene so many times?"

Rich answered patiently, "Madam, have you stopped to consider how many cinemas there are in this country?"

The lady drove on—satisfied. —B. C.

PRESS SECTION

Notes and Comment on the News

Cause and Effect

No one in the world had a larger part in putting people at the wheels of cars than Henry Ford.

There is, then, a certain ironic justice in the fact that his birthplace now lies squarely in the middle of a motorway junction in Detroit.

—Wichita *Eagle*

Prescription for Medical Quacks

Here are a few rules for spotting a quack: If he uses a special or secret machine or formula he claims can cure disease; if he guarantees a quick cure; if he advertises case histories and testimonials to promote his cure; if he claims medical men are persecuting him or are afraid of his competition; if he tells you that surgery or X-rays or drugs will cause more harm than good.

The best personal rule for you to follow is simple: If you're ill, consult a reputable doctor for diagnosis and treatment. At least you'll get something for your money.

—Atlanta *Constitution*

Coals to Newcastle

An Italian industrialist is conducting his own version of sending coals to Newcastle. He sends communists to the Soviet Union.

Renato Crotti, who lives in the heart of Italy's Red belt, sends communists and others on all-expenses-paid trips behind the Iron Curtain, with one condition. On their return they must make brief statements of their impressions, which he publishes.

Crotti became concerned when his Po Valley town of Carpi (pop. 50,000) swung left after the war. (In April 1963 its residents voted 56 per cent communist.) He travelled to the U.S.S.R. himself in 1959 and 1961, and he tried to tell his 700 workers and his friends about conditions there. When they wouldn't believe him he said, "Go and see for yourself, I'll pay the bill."

Ten went on the first trip in 1962, and 29 went last August. Most had their faith badly shaken when they saw Soviet conditions: low wages, high prices, shoddy goods, crowded housing, etc. After the first trip the local Communist Party prohibited members from accepting Crotti's invitations. But some went anyway. And they are telling about it. Crotti plans to send 100 more this year.

—New York *Times*

Splinter Group

Rather mysterious that President Walter Ulbricht should have got only a 99·95-per-cent vote in the East German elections last year.

A possible explanation is that the ·05 per cent spent election day escaping to the West.

—*Punch*

Flaws in State Planning

"SOMEONE received a new flat. With a big smile he went to a furniture store, but . . ." Thus begin many articles about the furniture problem in Soviet newspapers and magazines. What follows the "but" is well known, for good furniture is practically absent from Russia's stores.

We are building many new one- or two-room flats. Space is limited and the customers want light, modern furniture. But the factories refuse to produce it. For over 12 years Moscow Furniture Factory No. 2 has been producing a medium tank which is somehow called an armchair-bed. The other Moscow factory, Lira, has been producing for 15 years a table on which two helicopters can land easily.

Nobody wants to buy ugly and clumsy tables, armchairs and double beds. However, the factories stubbornly continue to produce these monsters. Why? Because their state-set production goals are calculated in weight of furniture, and it is obviously much easier to fulfil the plan by producing heavy pieces of furniture than by producing light, modern furniture.

—*Izvestia*, Moscow

Population: No More Room

SOME 75 million babies are spanked into life in various parts of the world during each year. Every one of them will be engaged in what Malthus called "the perpetual struggle for room and food."

Even now, from a third to a half of the world's 3,000 million people go to bed ill-fed or hungry. And in the decades ahead, reports the U.N.'s Food and Agriculture Organization, the equation between hungry mouths and available food could grow even more lopsided. Some FAO projections:

• It took the world tens of thousands of years to reach a population of 1,000 million in 1830. The next 1,000 million took only 100 years and the third thousand million just 30 years. By the end of the century, barring nuclear war or natural disaster, the figure will have doubled to 6,000 million.

• There are now 3·7 acres of cultivable land for each man, woman and child on earth. By the year 2000, with the world population doubled, the cultivable area will decrease to 1·8 acres a person.

• On this land, the world's food production must be trebled by the turn of the century—if there is to be any improvement in the diet of mankind.

Improved technology must be part of the answer. But there is also an undeniable need for quick, effective birth-control in the underdeveloped nations. Nothing less than an all-out attack on all major aspects of the problem can bring success. And time is of the essence. —*Newsweek*

The Simple Truth

SOME THINGS need no fuller explanation and are beyond contradiction. A perfect example comes in a recent report of freedom of the Press in Cambodia, Laos and Vietnam, issued by the International Press Institute. One of its conclusions:

"In Laos there is total freedom of the Press. But there is no Press, and no journalists, because there are no readers." —Milwaukee *Journal*



Sir Frederick Banting

How We Discovered Insulin

By Dr. Charles Best,
as told to J. D. Ratcliff

A first-hand account of one of the great achievements in medical history

The man who came into the laboratory on the morning of May 16, 1921, didn't look like a medical immortal. Few do at 29. Dr. Frederick Banting looked more like a farmer—powerful, with slightly stooped shoulders, blue-green eyes, big nose and jutting, stubborn chin. His voice, halting, quiet, betrayed an inborn shyness.

"Let's get started, Mr. Best," he said. "We really haven't much time." What an understatement. He had asked the University of Toronto for the use of a laboratory for eight weeks, for ten dogs, and for the help of someone who knew chemistry and physiology. The money value of his modest request was at most Rs. 475. With this he thought he could conquer a disease that had always baffled medical men: the merciless killer, diabetes!

"You read French, don't you?" Banting asked. I did. "Let's go to the library then," he said, "and look up how a Frenchman named Hédon took a pancreas out of a dog."

That was the beginning.

We both knew the horror of diabetes—described by a Greek physician 2,000 years earlier as "a disease in which the flesh melts away and is siphoned off in the urine." Somehow the bodies of stricken people stopped burning sugar into energy. Instead their bodies turned cannibal, consuming stored fats and proteins. There was unquenchable thirst—victims often drinking several gallons of water a day while losing a like amount of sugary urine.

Condensed from Today's Health

And their appetite was ravenous. The only treatment was a rigid diet designed to correct the patient's disrupted chemical balance. Severely stricken victims were offered a grim choice: eat well today and die tomorrow, or cut down to a few hundred calories a day and linger for a while in weary befuddlement.

Banting had seen diabetes convert a vivacious 15-year-old girl classmate at Alliston, Ontario, into a pathetic child for whom death came swiftly. At my home in West Pembroke, Maine, I had seen the same happen to my Aunt Anna. A stout, vigorous woman in her early 30's, she wasted to 80 pounds before she died.

The world would have considered us a most unlikely pair to match wits with this killer. I was a 22-year-old graduate student, working for my master's degree in physiology and biochemistry. Banting's experience in research was virtually nil. At his family's urging he had started out to study for the Methodist ministry. But, a halting speaker, he changed to medicine. He had been an average student.

After serving as a surgeon in the Canadian Army in the First World War and winning the Military Cross for bravery, he set up practice as an orthopaedic surgeon in London, Ontario. He waited for patients who never came. His fiancée could see little future with such a man, and they parted.

Now this man was staking all his meagre resources on his belief that he could cure the sugar sickness. He gave up his little practice, sold his furniture, books, instruments, everything. Banting couldn't afford another failure.

It was known that the pancreas—a pale yellow, tadpole-shaped abdominal organ that produces digestive juices—was somehow involved in this disease. In Germany, in 1889, Oskar Minkowski had removed a dog's pancreas, mainly to see if the animal could manage without it. Next day he noted flies clustered around puddles of the dog's urine. The urine was sugary; the dog, in normal health the day before, now had diabetes.

Did pancreatic juices, then, contain a factor that normally regulates the metabolism of sugars? To test the idea, research men tied off the ducts that carry these juices to the intestine. When dogs had this surgery, their pancreases shrivelled and degenerated—but they did *not* get diabetes! The shrivelled organs, unable to send digestive secretions to the intestines, were still producing the anti-diabetic factor.

But, if it wasn't in the pancreatic juices, where was it?

Attention shifted to the thousands of mysterious little "islet" cells scattered through the pancreas and surrounded by tiny capillaries. Did they secrete some "X" stuff, perhaps a hormone that regulated the burning of sugar? And did they empty it, then, not into the intestine

but into the bloodstream? Several research men had suggested as much and had gone hunting for the elusive hormone. But all had come home with empty game bags.

Now it was our turn.

"Maybe it's this way, Mr. Best," Banting said—not for several days would we become Fred and Charley. "Maybe when the researchers remove a healthy pancreas and grind it up to extract this X stuff, enzymes in the digestive juice mix with the X stuff and destroy it—just as they break down proteins in the intestine. Maybe that's why no one has been able to find it."

Knowing that when the pancreatic ducts are tied off the cells which secrete digestive juices degenerate faster than do the islet cells, we would tie off these ducts in dogs and wait. "In seven to ten weeks the pancreas will degenerate, stop making digestive juice—and there will be nothing to destroy the X stuff. You extract it. Then we'll give this extract to a diabetic dog and see if it lowers the sugar in blood and urine."

I did my chemical work in our cubbyhole lab. Dog surgery was performed two flights up in the skylighted attic. Before summer was over that attic became as steamy as any Turkish bath. To get some relief we wore little or nothing under our white lab coats. Since money was short, we ate in the lab. Eggs and sausages fried over a Bunsen burner became our staple diet.

One serious problem was a scarcity of dogs. When the situation became acute, Banting said, "Crank up The Pancreas, Charley, and let's go." (This was our name for his Model T Ford.) We rattled through the poorer parts of Toronto, hunting for dogs whose owners would part with them for a dollar.

We had tied off the first pancreatic ducts in May, and in early July we expected the pancreases to be shrivelled, the X stuff accessible. We opened one of the animals—and found the pancreas blooming with health, no atrophy, no shrivelling. We had tied the ducts incorrectly.

Our eight weeks were almost up. This would have been as good a time as any to accept defeat. But Banting was a stubborn man. During the war he had acquired an ugly shrapnel wound in his right arm. Doctors had wanted to amputate. Banting refused—and nursed the arm back to health. Now we were going to nurse our sickly project back to health.

Professor John Macleod, head of the physiology department, who had provided us with work facilities, was on holiday in Europe. "He won't know the difference if we stay on," we decided.

We began reoperating on the dogs, tying off ducts, correctly this time. On July 27 we got the beautifully shrivelled, degenerated pancreas we wanted. It should contain the X stuff—if the X stuff existed.

Now we sliced the pancreas into

a chilled mortar containing Ringer's solution and froze the mixture. We allowed it to thaw slowly, ground it up and filtered it through paper. A dying diabetic dog was waiting, too weak to lift his head. Fred injected 5 c.c. of the filtrate into a vein. The dog *looked* a little better —but self-delusion is easy at such times. Blood tests were needed.

I drew a few droplets from the dog's paw and began testing for blood sugar. Banting hovered over me. If sugar were heavily present the reagent in the test-tube would turn deep red; little sugar and it would be a pale pink. There was a new test every hour and the reagent was getting paler, paler. Blood sugar was going down—from 0·20 per cent, to 0·12 per cent, to . . . It was heading towards a normal 0·09 per cent. This was the most exciting moment of our lives.

Life now became a blurred nightmare of work. This thing had to be nailed down. Dogs had to be injected, blood had to be drawn for testing, urine collected. It was an hourly, round-the-clock schedule. We stretched out on lab benches to get what sleep we could.

But there was an ever-reviving miracle for us to behold: dogs glassy-eyed with the sleep of death upon them; then, a few hours later, they were up, eating, tails wagging. Jolted back to life, one dog lived 12 days, another 22 days. Our pet was Marjorie—black and white, vaguely collie, she learned to jump up on a bench, hold out her paw to give us a blood sample and keep still to get the injection on which her life depended. For 70 days she was alive, well. Then we ran out of the extract, isletin, as we then called it. (Only later did Macleod persuade us to change the name to insulin.)

It took almost all the isletin we could extract from a degenerated pancreas to keep one dog alive for one day. How far would this go towards keeping alive millions of diabetics all over the world?

Fred remembered reading that the pancreas of an unborn animal was mainly islet cells—since the digestive juice wasn't needed in the womb. As a farm boy, he also knew that farmers frequently bred cows before sending them to the slaughterhouse, to hoist weight. Wouldn't pancreases from the unborn calves be rich in isletin? We cranked up The Pancreas and headed for a slaughterhouse. Later, back at the lab, we ground up the salvaged pancreases, extracted, purified and reaped a rich harvest of isletin.

We could now keep dogs alive as long as we wanted. Eventually, of course, it was found that with improved extraction methods any animal pancreas—sheep, pig, cow—provided insulin. There was going to be enough for all needs.

By November 14 we were ready to share some of our excitement with the world. Before the Journal Club of the Department of Physiology, Banting and I gave our first

paper—complete with lantern slides showing blood-sugar charts. But the crucial question still had to be answered. *Would insulin work in human beings?*

Across the street in Toronto General Hospital was 14-year-old Leonard Thompson. After two years with diabetes, he was down to 65 pounds, had scarcely the strength to lift his head from the pillow. By the usual criteria he would have, at most, only a few weeks left.

We had established that an insulin "cocktail," taken by mouth, did not work. So now Banting and I rolled up our sleeves. I injected him with our extract and he injected me—we had to be sure it wasn't too toxic to be tolerated by human beings. Next day we had slightly sore arms, that was all.

So, in January 1922, the wasted little arm of the dying boy was injected. Testing began. All over again, it was the story of our dogs. Blood sugar dropped—dramatically. Leonard began to eat normal meals. Sunken cheeks filled out, new life came to weary muscles. Leonard was going to live! (He lived another 13 years and died in 1935—of pneumonia following a motorcycle accident). He was the first of dozens, then hundreds, thousands, millions to get insulin.*

Honours began to shower on us. For the best piece of research conducted at the university that year we were awarded the Reeve Prize. A grateful Parliament voted Banting a life annuity. Then came a great research institute named after him, and later one named after me. When Banting won the Nobel Prize in 1923 he shared the money equally with me.

Both of us stayed on at the university, and through the succeeding years concentrated on our individual research projects. But the excitement of the old days was missing. Then on a wintry February day in 1941, we were walking across the campus. "Charley," said Banting, "let's start working together again. You handle the chemistry, and I'll . . ."

It was not to be. Three days later Banting—now Major Sir Frederick Banting, working on problems of aviation medicine—was aboard a two-engine bomber bound for England. The plane crashed in a snowstorm in a forest near Musgrave Harbour, Newfoundland. Banting, with a lung punctured by crushed ribs, used his waning strength to bandage the wounds of the pilot, the only survivor. Then he lay down on pine boughs in the snow and went into the sleep from which he would never awaken.

Of all eulogies, perhaps most moving was the one spoken five years later at a London gathering of the Diabetic Association: "Without Banting this meeting could have been only a gathering of ghosts bemoaning their fate."

* See "Dr. Banting's First Insulin Miracle," The Reader's Digest, June 1963.



Koala

Nature's Many Means of Survival

Some strange creatures have evolved to meet the demands of their environment

By Jean George

A bird that eats feathers, a mammal that never drinks, a fish that grows a fishing line and worm on its head to catch other fish. Creatures in a nightmare? No, they are very much with us as co-inhabitants of this earth.

Nature has fashioned most animals to fit the many faces of the land—squirrels to trees, camels to deserts, moose to marshes, frogs to lily pads.

Give nature an environment or situation and she will evolve a creature, adapting a toe here, an eye there, until the being fits the niche. As a result of this hammering and fitting, however, some really unbelievable creatures circle the sun with us.

Australia has many strange beasts, one of the oddest of which is the koala. Perfectly adapted to one specific tree, the eucalyptus, this living teddy bear does not need anything else, not even a drink! The

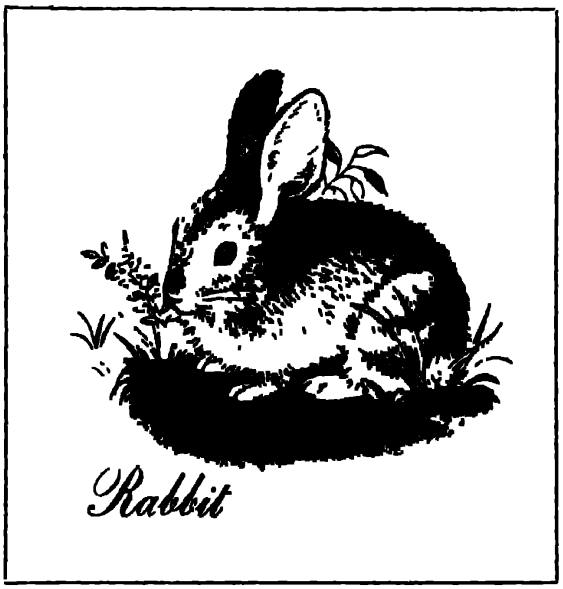
moisture in the leaves is just right for the koala, making it the only land animal that doesn't need water to supplement its food.

The creature with the fishing line on its head was created for the dark canyons of the sea. Here food is so scarce that the deep-sea angler fish, which preys on smaller fish, grew a line, with an appendage on the end that wiggles like a worm. This catches the attention of the occasional passer-by. A fish approaches the bait, and the toothy angler swirls up and swallows him.

The gigantic ocean bottom creates other problems. A male angler fish could swim for years without meeting a female of his own species. Nature's solution to this problem is for the female to carry a dwarfed husband tightly fused to her body. Marine biologists believe that this nuptial begins when the eggs first hatch and there are many fry of both sexes. A male then grabs hold of a female with his mouth and hangs on until he has literally become a part of her. His mouth becomes fused to her stomach, and for the rest of his life the male remains attached to his mate, marking the most amazing union on earth.

Sound has shaped the bodies of many beasts. Noise tapped away at the bullfrog until his ears became bigger than his eyes. Now he hears so well that at the slightest sound of danger he quickly plops to safety under a sunken leaf. The rabbit has long ears to hear the quiet "whoosh" of the owl's wings, while the grasshopper's ears are on the base of his abdomen, the lowest point of his body, where he can detect the tread of a crow's foot or the stealthy approach of a shrew.

Sometimes food will determine an animal's appearance. Earthworms have shaped the woodcock, a snipe-like bird of the forest floor.



Rabbit

This creature has a long narrow beak that looks like a pencil and fits neatly into the burrows of the worms. But the beak has its dis advantages; with it buried deep in a worm hole the woodcock is vulnerable to attack from above. To counteract this danger, the woodcock has eyes near the top of his head. This singular device permits him to scan the trees for danger even when his beak is buried. A successful arrangement

for longevity—but it certainly creates an odd-looking creature.

The need to catch elusive prey has evolved some staggering biological tricks. The sea anemone, a flower-like animal of the tidemark, is usually riveted to one spot, yet it feeds on darting fish. A diabolically clever trap was necessary to catch them, so the anemone developed tentacles with bombs in the end of each. When a fish forages into these tentacles the ends shoot a thin


Woodcock

thread into the fish's body. The thread in turn explodes a paralysing poison. The stunned fish is hauled in by the tentacles and shoved into the anemone's gullet.

Nature seems to have done its utmost to create preposterous gadgets for self-defence. The jacana, a bird of the American tropics, for instance, is endowed with spurs which unfold like a flick-knife at the bend of the bird's wings and with which he can slash his enemies to shreds.

Lizards are professionals in the art of warding off attack. The two-headed skink, whose tail is shaped like his head, confuses his enemy. A hawk, upon attacking this fellow, anticipates that he will run in the direction of the lifted head and makes allowances for the movement. However, the bird usually strikes nothing, for he is aiming at the tail. The real head took off the other way.

In order to travel in a hostile world, the Portuguese man-of-war first mastered the art of floating. To do this it evolved a purple bag and inflated it with gas from a special gland. As a crowning idea it also grew a sail! Launched, the man-of-war can blow away from enemies or approach food by putting its sail up and down. When severely threatened, it forces the gas out of the float and submerges.

There is hardly any environment, however hostile, that some creature has not mastered. Land is, of course, the nemesis of the fish. If they flop out on it they die. If their ponds dry up, they are helpless. Given this situation, it was almost certain that some fish would evolve a way to overcome it; and so there is a lungfish. It is an air breather and must come to the surface every 20 minutes or so, otherwise it drowns. When the ponds of Africa dry up in

the arid season, the lungfish wrap themselves in mud and wait it out, sometimes for years. When the rains eventually return, they resume their water life.

One summer I saw a sleek mother horned grebe herding her three bobbing young to supper among the green weeds. Suddenly I noticed through my binoculars that she was feeding her babies quantities of feathers from a deserted duck's nest. As she stuffed the dry feathers into the gaping mouths, she made two or three pokes to get each one down. Lastly, she worked a dozen or so down her own throat; then, sailing low on the water, she vanished contentedly among the plants.

I later learned that 60 per cent of the grebe's diet is feathers. When I asked why, a biologist answered, "Because nature finds a use for everything. Feathers seem to act as a strainer to prevent fishbones from entering and damaging the intestines."

Just as nature adds things to creatures that need them, so she occasionally takes things away from those that don't. The adult Mayfly, for example, has no mouth or stomach. Last year, by a lake, I found myself amid hundreds of thousands of these insects. I told the conservation officer whom I was with that I was glad they didn't bite. He replied that they have no mouths to bite with. "An adult Mayfly lives but one day," he explained, "and that day is devoted entirely to pleasure. They do nothing but dance and mate all their short life, and so they do not need a mouth."

Horned Grebe



With all this elaborate evolution, it is not surprising that some of nature's inventions got out of hand. Into this category falls the speedometer of reindeer. A tendon snaps back and forth over a bone in the reindeer's foot, noisily tapping out the speed of his gait. Useless. And so is the nose on the stomach of the scorpion.

But probably the most dumbfounding of nature's extraordinary creations is the horned toad—a small lizard of the South-West United States. A herpetologist once invited me to observe one of these lizards just after it had moulted. In a sand-filled glass cage I saw a large male. Beside him lay his old skin. The herpetologist began to annoy

the beast with mock attacks, and the old man of the desert with his vulnerable new suit became frightened. Suddenly his eyeballs reddened. A final fast lunge from my friend at the beast and I froze in astonishment—a fine spray of blood shot from the lizard's eye, like fire from a dragon! The beast had struck back with a weapon so shocking that it terrifies even the fiercest enemies.

Later I walked home, pondering the bizarre methods for survival with which evolution has endowed earth's creatures, sometimes comical, sometimes pathetic. I knew the biologists were right: If any adaptation is possible, nature has tried it.

How doyousayit?

I WAS STARTLED recently when my little granddaughter demanded insolently, "*Whose* bookisthis?" She is not an insolent child, and I stared at her in amazement. Then it came to me that what she really wanted to say was "Whose *book* is this?" or perhaps "Whose book *is* this?"

The style of asking a question with the accent entirely on the first word of a sentence seems to be growing. To an old-fashioned person like myself it is strangely offensive to have a question fired point-blank: "*What* isyourname? *Where* doyoulive? *What* wereyoudoing?" And one would shudder to think that Juliet, leaning on the balcony, might have murmured, "*What's* inaname?"

The accenting of words in a sentence is a much more difficult affair than the accenting of syllables in a word; yet a carelessly accented sentence will go as far towards branding you illiterate and uncultured as a badly accented word. —*Atlantic Monthly*

Our Keyed-up Life

NO MATTER how simply your life is arranged, you probably have to lug keys about with you. Even if one's possessions consist only of a few odds and ends in a suitcase in a boarding-house room, it is still necessary to carry keys to the room, the suitcase and the front door.

Keys are a penalty of civilization. Each and every key on your key ring is a symbol of potential trouble. It represents responsibility; it fits a lock intended to protect something that you are concerned about.

Everything you feel obliged to put a lock on means one more worry.

Select a hundred men at random, study their faces for lines of care, and then count the number of keys they carry. Wouldn't there be a fair chance that the man with the most keys has the most worried expression? —F. K.

HOLLYWOOD Where Are You?



A famous novelist returns to the film capital he knew intimately, and discovers that the old dream factories have finished with the box office

By Budd Schulberg

Author of "What Makes Sammy Run?," "The Harder They Fall," "The Disenchanted," etc

I may as well confess it. I am a Hollywoodologist. Have been ever since 1920. That's when my old man, B. P. Schulberg, who had leaped on the bandwagon a decade earlier as a writer of "photoplays" in New York, took me with him to a place known for its date palms, orange groves and empty barns converted into "studios"—Hollywood. I was six then, and I grew up there, in that boom-town, gold-rush Hollywood, that isolated world of power and glamour.

Condensed from Life.

Photograph Greta Garbo and John Gilbert in a scene from M-G-M's "Queen Christina"

Revisiting My Home Town, I expected to walk the lovely streets of those great dream factories still anachronistically called studios—playground of my poor-little-rich-boy childhood—and to exchange ideas with old chums and fellow screen-writers I'd left behind. Instead I spent the first week conferring with telephone operators. It went like this: "Stanley Kramer's office. Mr. Kramer? He's in Moscow—won't be back for at least four weeks." Another secretary: "John Huston? He isn't here—he lives in Ireland now." What about Darryl Zanuck, the chest-beating, big-cigar man from Wahoo? "Oh, Mr. Zanuck *never* comes to Hollywood. You might be able to contact him at the St. Regis in New York—or maybe next week in Paris."

I walked the empty streets and the spooky major-studio lots, overwhelmed with the feeling of Where *is* everybody? Maybe I should try Romanoff's, the old hangout for Bogie and O'Hara and Benchley, later for clansmen Sinatra and Lawford, and for everybody who was anybody in Prince Mike's private social register. Bad day at Mike Romanoff's. Hadn't I heard? Romanoff's was shuttered. Finis. Kaput.

Where *was* Hollywood? I asked a well-known director whom I caught at the airport ("just changing planes," as he quickly explained): Who's head of M-G-M? The director looked at me with a thoughtful, if vacant, stare. "That's odd, I don't know." Then he caught a jet to Madrid where he was shooting his next epic, and I was left there with my old world of Hollywood power (it was always power first, glamour second) crumbling around me.

Not know the name of the head of M-G-M? In my youth, any counterman at any Hollywood Double-nutburger stand knew who the head of M-G-M was—and take off your hat and salute the flag when you say it, brother—Louis B. Mayer, God bless him! Under the reign of L.B. the roar of the M-G-M lion was heard around the world. L.B. lorded it over Greta Garbo and John Gilbert and Norma Shearer and Clark Gable and Myrna Loy and Wally Beery and Joan Crawford and Spencer Tracy and a cast of thousands. At M-G-M there were producers in droves, and under them sub-producers. There were the biggest directors in the business, and writers, hundreds of writers, waiting—no, *begging*—for their assignments and their weekly paycheques of 500, 1,000, 2,000 dollars and up.

The major studio in my Hollywood was a kingdom self-contained. I saw it first-hand through my father, who ran Paramount Studio for a splendid decade. My father and L.B. had once shared a funny little studio, the Mayer-Schulberg Studio, on Mission Road, next door to the Selig Zoo. I have an old

photograph of my father laying a tentative hand on the head of the zoo's senile and obliging lion which was to become the symbol of M-G-M.

Within five years the hyphen between Mayer-Schulberg had been replaced by a *"v."* They became rival tsars, rival giants, rival haters.

The old Hollywood was controlled by major studios run by passionate, powerful personalities who dictated the 50 to 60 feature pictures every studio made every year. In the hands of half a dozen moguls, tsars, rajahs, tycoons, geniuses was a mighty industry and, incidentally, America's greatest popular art form.

Each of them had awesome power over the destinies of thousands. A lowly camera slateholder could become an A-picture cameraman. A bit player could become a star. An office boy could become a writer and even move up to producer. All anybody needed was the touch from the wand of Mayer, Warner, Cohn, Schulberg, Zanuck or David O. Selznick. Before I was in high school, people used to beg me to show my father their script or put in a good word for their talented little girl.

The battle for supremacy between Mayer and Schulberg became so bitter that when my father, long fallen from his pinnacle, suffered a near-fatal stroke, he asked me to put ten dollars aside after his death. "Put my ashes in a box," he said, "and hire a messenger to bring them to Louis's office with a farewell message from me. Then when the messenger gets to Louis's desk, I want him to open the box and blow the ashes in the — —'s face."

Such was the Old Testament spirit of the Old Hollywood, which is now gone, almost as suddenly as it came. Big-Studio Hollywood—L.B.'s and B.P.'s, C.B.'s and D.Z.'s Hollywood—is deader than last week's flop, deader than a dropped option, deader than the look in Bogart's eyes when something displeased him.

I should like to say a few unexpectedly kind words over this vanished world. It was a world that had a passion for making movies. It was a world that knew it had discovered a magic key—to make people laugh (Sennett, Chaplin, the Marx Brothers, W.C. Fields, *It Happened One Night)* or cry (Chaplin, Garbo, Emil Jannings, Wallace Beery, *Skippy, The Champ).* It was a world that moved us to righteous social anger (Paul Muni, John Garfield, King Vidor, *Fury, They Won't Forget, The Grapes of Wrath);* a world that shook you with its energy (Jimmy Cagney, Humphrey Bogart, Carole Lombard, Bette Davis, *Public Enemy, Scarface, Nothing Sacred, The Front Page);* a world of classics *(David Copperfield, Crime and Punishment, Moby Dick, Wuthering Heights,* Leslie Howard and the

Barrymores). It was a world of beautiful women (Billie Dove, Dolores Del Rio, Gloria Swanson, Greta Garbo, Loretta Young, Norma Shearer, Marlene Dietrich, Miriam Hopkins) who did not have to take off all their clothes to incite sexual hungers in an audience—the drama of the act of love was in their eyes.

It was teeming, vulgar, brilliant, wasteful, inspired, vicious, belly-laugh, tear-jerker but simply colossal, that Hollywood of 1912–1948. Maybe the great tycoons ground out celluloid like sausage, canned it like beans, but with the courage of their ignorance they not only turned out bad movies but also enduring trail-blazers.

I grew up mocking those pioneers when I wasn't despising them—nearly all of them, excepting my father, who read books and not just synopses; Sam Goldwyn, in his life-long pursuit of good taste; Irving Thalberg.

But many of the tycoons—immigrant boys who fractured the language, who wanted to put happy endings on classic tragedies—seemed to me stupid. Ask them what they thought of Voltaire and they'd say they didn't know, they hadn't seen the picture. But in two manic decades they had carved out empires and spawned an art form that quickly dominated the world. In the late 1930's the number of cinemagoers each year was double the total population of the earth. People just went to the movies; it was a habit, like necking or smoking cigarettes.

Why did Hollywood pass from world domination? The great decline dates from the late 1940's, when a big bad wolf called Television settled down at the town's door.

Month by month, Americans were losing the movie habit. Hollywood has always been Panicsville, and here was an honest-to-God panic. The tycoons and the moguls and the rajahs clutched each other like terrified passengers of the *Titanic* and assured each other that what they had hit was not really an iceberg, just a floating ice cube from the last big Marion Davies wing-ding. Why, people would *never* give up the movies. Well, if you had a hate on big-studio assembly-line production, as I had, and had jumped ship at an early port of call, as I did before the war, it was sort of fun to stand off and watch the big luxury liner starting to list and getting ready to plunge to the bottom.

Also, after the war, foreign films experienced a nascency that has developed into an artistic revolution. For some time this was shrugged off as art-theatre stuff. But from 1953 to 1963, foreign films multiplied their gross from five to 70 million dollars, and suddenly "art" and "experiment" and "freedom from cliché" carried the smell of big money. Hollywood had defaulted its creative leadership to new overseas poets of the medium,

plunging into their art with an excitement, an enthusiasm, an inventiveness that once was Hollywood's.

Seeking the answer to its most severe challenge yet, Hollywood today has several solutions, including independent productions (run by oldtime pros or by new-style carpet-baggers), and super-studio blueprints for merging television with the feature-film markets of the world.

First, the carpet-baggers—resourceful, opportunistic producers, unencumbered by the overhead of white-elephant studios. Some carpet-baggers start out as fly-by-nights and wind up as institutions—like Sam Spiegel. In his hungry days, the Spiegel technique was to dangle the bait, and fly out of town before anybody got around to the practical questions like money. He would obtain the rights to a story, say *The African Queen*, by promising to pay for it "once I've put it together," then fly to Europe and to director John Huston, who likes the C. S. Forester story but even more loves to travel to far-off places. Then to New York to tell Katharine Hepburn he's got a great part for her with Huston directing; then on to Hollywood to collect Humphrey Bogart, intrigued by the story and the Huston Hepburn names. Finally, there sits—or rather flies—Spiegel with a beautiful package, easily-financed—and, incidentally, a lovely picture.

Sam has come a long way, from living lavishly if precariously on the cuff in the late 1930's, to his string of Academy winners (*On the Waterfront, Bridge on the River Kwai, Lawrence of Arabia*), a 165-foot yacht harboured at Monaco, and a New York penthouse laden with art treasures.

Maybe Sam Spiegel proves there is no substitute for unmitigated gall, plus unmitigated charm, plus unmitigated taste.

The big studios are still there, but fighting for their lives. Doing best are Disney's; Warner's, still family-owned and solvent; and Universal, the one studio that seems to be bullishly expanding.

There is also today a solid little group of dedicated artists—director-producers who believe in Hollywood and in their own one-picture-at-a-time independence. I discovered more and more of them, determined soloists, working hard on the beach-heads they have carved out of the collapse of the old system.

I could not leave town without seeing my favourite archetype individualist—spry, dapper, 81-year-old Sam Goldwyn, the last of the first. Goldwyn, whose first film (*The Squaw Man*) went into production 50 years ago, disagrees indignantly with those who talk of cinema as an international art, hardly mentioning Hollywood.

"Today in this country," he said, "you can run the gamut from an expensive picture like *West Side Story* to an inexpensive one like

David and Lisa. There is still tremendous creative vitality in Hollywood and the American motion-picture industry."

Perhaps.

As my getaway plane circled the airport I looked back at the town of my childhood, now spilling over in all directions, transforming my once rustic, pepper-tree Hollywood into an unwieldy megalopolis. Suddenly it came to me that I didn't really hate it any more. There are picture-makers there still, and the best of them are at least trying to break with the old formulas, the bad habits, the glossy imitations of life that, for a long time now, have made "Hollywood" an adjective of derision.



Letter of Recommendation

A COMPANY executive received this letter from a friend and former business associate:

"Would you be kind enough to keep an eye open for a job that might be suitable for our young David this summer? I know that such jobs are hard to find nowadays, but that's all right, for so is David most of the time.

"David is 16½, but backward for his age. He is very strong, with a powerful right arm which comes from combing his hair in front of a mirror for hours at a time. He is a very persuasive talker, having convinced his mother, that the 'C' marks all over his school report stand for 'Creditable.'

"At the dinner table the other evening, he said, 'Pass the potatoes.' His mother said, '*Please* pass the potatoes.' David said, 'I asked first.'

"What more would any prospective employer want? Don't write—telegraph." —C. F. D.

It's His Funeral

A YOUNG insurance salesman had just completed his office training and, rate book in hand, went off to a rural area where he saw a farmer ploughing. Waving the farmer to a stop, the salesman eagerly gave his newly memorized sales talk, covering a multitude of reasons why the farmer should leave his loved ones well provided for. After letting the agent have his say, the farmer shook his hand and replied, "When I die I want it to be a sad day—for everyone!" —J. L. B.

NO CHAINS ON "THE BEAVER"

By Irwin Ross



The last of Britain's old-style Press Lords, Beaverbrook is a man to whom journalism means causes to fight and battles to glory in

He sat in the mild October sun on the terrace of Cherkley, his country home in Surrey, an old man bundled in a huge coat, a black felt hat crushed on his head, one hand resting on the telephone at his side. "Vines," he called out, "get me my pending folder." The secretary—one of four—came on the run. "Vines," he shouted two minutes later, "get me Mr. Baker." The deputy editor of the *Daily Express* was soon on the line. The old man uttered a gruff "Hallo" and asked, "What's the news?" He listened intently, interjecting occasional comments. "You have a photographer out there, I hope . . . What else is going on? . . . Between England and France? . . . Now—would you take a leader?" And Beaverbrook rapidly outlined an editorial for the next day's paper—too fast for anyone to take notes, but I was well aware that at the other end of the line

a tape recorder was preserving his words. (All Beaverbrook's chief executives have tape recorders, to keep up with him.)

At 84, Lord Beaverbrook, a transplanted Canadian, is still as hard-driving and irrepressible as ever, after a fabulous half-century career of newspapering, politicking and generally setting Britain by the ears. The last of the old-fashioned Press Lords, he puts his personal stamp on three national newspapers—the *Daily Express*, the *Evening Standard* and the *Sunday Express*. Last year he published his twelfth book and married for the second time (his first wife died in 1927).

To Beaverbrook, journalism has always meant causes and battles—which he glories in. I once asked him about his feud with Stanley Baldwin. "Vines," Beaverbrook boomed, "what was that remark Baldwin made about me being a prostitute?" The secretary reported that Baldwin had accused him of seeking "power without responsibility—the prerogative of the harlot throughout the ages." Beaverbrook threw back his head and roared with laughter.

He flipped over the pages of a fat scrapbook dealing with the 1945 elections. "Wonderful! Wonderful!" he exclaimed, pointing to attacks he had sustained. *The Times* had taken him to task in an editorial, "The Bad Wolf." The *Co-operative News* tagged him "Minister of Chaos"; another article proclaimed, "Beaverbrook in Blunderland."

Most of the assaults were dutifully reported in the Beaverbrook papers, except once in June 1945, when the *Daily Express* ran the statement: "To make space for Mr. Churchill's broadcast speech, reports of attacks on Lord Beaverbrook last night have been held over."

"The Beaver's" own employees have been free to criticize him in his own papers—a privilege of which his cartoonists have freely availed themselves. The late David Low's caricatures of him—balding, moon-faced, with wide, smirking mouth—were famous.

Zesty, full of enthusiasm, at times Beaverbrook is a little in awe of his own durability. "People wonder why this tree is still standing," he says. "*I* wonder why."

The answer, he speculates, may have to do with "the emotion and passion" which has infused all his works. "I am the victim of the Furies," he once wrote. "On the rockbound coast of New Brunswick the waves break incessantly. Every now and then comes a particularly dangerous wave smashing viciously against the rock. It is called The Rage. That's me."

The Rage administers his vast enterprises from an overstuffed chair in the study at Cherkley. He has two telephones within reach, a dictating machine, a button board to summon his secretaries, pads of note-paper, newspapers, books,

stacks of correspondence. He scans letters and memos, tossing discards to the floor; by noon he is ankle-deep in paper. At regular intervals he telephones the editors of his three papers. His first question is always "What's the news?" and he often has an item or two to contribute to it from his vast network of government contacts.

As inspiration seizes him, Beaverbrook snatches up the microphone of his dictating machine, and fires away with ideas, criticisms, exhortations. Every day, recording disks are dispatched by courier to the *Express* office in Fleet Street. "Too much space given to cartoons," a communiqué may admonish. Or, "First edition of the *Daily Express* has no Indonesian pictures. Why?" He expects a prompt reply by phone or teleprinter. Business conferences go on while he is getting his hair cut, breakfasting in bed or having his bath. When he used to go riding, a mounted secretary would accompany him, scribbling notes on a pad.

Beaverbrook has long employed some of the best talent in Fleet Street, but his recruiting methods have always been highly individualistic. In 1948 he read and admired a book on the war by Milton Shulman. Immediately word went out: *Find Shulman!* To everyone's surprise it developed that Shulman was already employed on the *Evening Standard,* in a minor job. Beaverbrook summoned him to Cherkley and asked if he was interested in becoming the paper's film critic. Shulman said that he rarely went to the cinema. "It doesn't matter," Beaverbrook assured him.

After lunch they adjourned to the private cinema for the showing of a mystery film. Beaverbrook, who had already seen the picture, promptly fell asleep, awakening after the second reel. "Who killed the blonde?" he demanded. Shulman could hardly say, after only two reels. "Never mind," said Beaverbrook. "Go home and write a 400-word review. Send it to me tomorrow." Shulman left, dismayed. Fortunately, he found the film in an out-of-the-way London cinema, saw it at 10 a.m. next day, and had his review to Beaverbrook by early afternoon. He got the job.

However eccentric his selection methods, Beaverbrook stands by his employees. Shulman, a witty and corrosive writer, soon became Fleet Street's most celebrated film critic; his biting reviews also won him the enmity of the film companies. In 1953, they all withdrew their advertising from the Beaverbrook Press. Film advertising was worth £250,000 (Rs. 33 lakhs) a year, but Beaverbrook refused to budge. Shulman stayed in his job, and after four months the boycott began to crack.

The years 1940–41 were Beaverbrook's heroic phase. In May 1940, it became apparent that the country was woefully unprepared to defend itself in the air. One of Churchill's first acts as Prime Minister was to

make Beaverbrook Minister of Aircraft Production, giving him complete control.

Beaverbrook was no production genius. He was, however, probably the most energetic and ruthless man in Britain. Convinced that the six months ahead would determine the country's fate, he was prepared to use any stratagem, any procedures, to obtain the vital weapons. He worked seven days a week, 18 hours a day, and imbued his colleagues with missionary fervour. At scores of aircraft factories he addressed the production-line workers, overwhelming them with eloquent appeals, telling them that the fate of the nation depended on them.

He stepped on bureaucratic toes —taking factory space wherever he could find it, seizing equipment under the control of other Ministries. A typical manoeuvre involved a shortage of a certain steel alloy. The Beaver could get nowhere with the Ministry of Supply, the normal procurement channel, so he authorized an associate to obtain the alloy through a friend in the United States.

When the shipment arrived in Liverpool, the harbour had been severely damaged in an air raid and 100 ships were waiting to be unloaded. Again through unofficial channels, Beaverbrook arranged for his cargo to be unloaded out of turn —without the knowledge of the Ministry of Supply.

These tactics created considerable resentment, but what counted in the end was that Beaverbrook produced the planes without which the Battle of Britain could not have been won. In May, when he took over, the metropolitan Air Force had less than 800 serviceable Hurricanes and Spitfires; in September, despite severe losses, the figure was 1,228 serviceable aircraft. Churchill put it well to the House of Commons: "Lord Beaverbrook is at his very best when things are at their very worst."

Until Beaverbrook received a peerage in 1917, he was William Maxwell Aitken. Max, as he was known, was born in 1879 in Maple, Ontario, one of ten children of a Presbyterian minister who moved to New Brunswick the following year. After leaving school Max briefly studied law, then sold insurance and ran a bowling alley in Calgary; he was in the meat business for a while in Edmonton.

In his early 20's, in Halifax, he went to work as a bond salesman, and immediately demonstrated a flair for corporate facts and figures as well as great persuasiveness with customers. He made ten per cent of what he sold, and by the time he was 22 he had run up sales of over 1·5 million dollars (Rs. 71 lakhs).

Before long he was promoting industrial mergers—in steel, electric power, cement and other industries. He would arrange the mergers, then sell the securities of the new firms to the public. At 31, he had amassed a

fortune of nearly 5 million dollars (Rs. 2 crores) and earned a reputation as a financial buccaneer.

With his wife he went to England in August 1910 on a visit. At the behest of his friend Bonar Law, he stood for parliament in the election of December 1910. The young Canadian won an upset victory, became a celebrity overnight and immediately plunged into the thick of British party politics.

In 1916, Aitken had a major hand in the manoeuvres that led to the installation of Lloyd George as Prime Minister. For his efforts he was elevated to the House of Lords as the first Baron Beaverbrook—a distinction he was later to regret, for it removed him from the true centre of power. Also in 1916 he bought control of the *Daily Express*, a struggling paper for which he paid £17,500 (Rs. 4 lakhs). His motive was purely political, to promote the future of Bonar Law and push his own campaign for preferential treatment in Britain for Empire products, and tariffs against the rest of the world.

To convert the multitude, he had first to seek a wide audience; and to reach a wide audience, he needed a highly readable product.

Beaverbrook set out to learn the craft of journalism himself and, over the years, the distinct style of his papers took shape: simple, crisp writing, echoing the staccato beat of Beaverbrook's own speech, emphasis on the human element, plus dramatic eyewitness reporting. The late Arthur Christiansen, for 25 years editor of the *Daily Express*, said the aim was to present the news "in such a way that it would be interesting both to the permanent Secretary of the Foreign Office and to the charwoman who brushed his office floor in the morning . . . My approach . . . was based on the idea that when you looked at the front page you said 'Good heavens!', when you looked at the middle page you said 'Holy Smoke!', and by the time you got to the back page—well, I'd have to utter a profanity to show how exciting it was."

The product appealed to the public. The *Express* had a circulation of 229,000 when Beaverbrook bought it; today it sells over 4·25 million and blankets the country from simultaneous publication points in London, Manchester and Glasgow.

Ironically, when he finally attained an audience of millions Beaverbrook found that many who enjoyed his papers would not buy his opinions. The ideas that he has tried to sell have not changed substantially with the years. No journalist has more eloquently hymned the glories of the British Empire or mourned its dismemberment with greater anguish. Since 1951, when he opposed the government's Empire policy, the figure of the Crusader atop the *Express's* front page has been in chains. In the 1920's and early '30's he campaigned strenuously for Empire Free Trade,

battling against the orthodox Conservative leadership and even putting up his own parliamentary candidates. (Beaverbrook lost.) In 1961 and 1962 he ardently opposed Britain's entry into the Common Market.

He has always been a nonconformist in Conservative politics, opposing the official line on such subjects as freedom for Ireland (which he favoured) and the enforced abdication of King Edward VIII (which he opposed). His papers ridicule the hereditary peerage, extol economic freedom for the individual, glorify affluence for the multitude. Over the years, he has unquestionably affected the country's attitude on these issues.

The newspapers by no means consume all his energies. He devotes a good deal of time to his benefactions in New Brunswick, his home province; he has spent 20 million dollars (Rs. 9 crores) on schools, libraries, skating rinks and other gifts. For some years, he has been publishing a series of political chronicles of the great events in which he was both eyewitness and participant, starting with the First World War. Three histories have appeared—the latest *The Decline and Fall of Lloyd George*—and he is currently working on two more, *The Age of Baldwin* and *Churchill's War*. Each volume published so far has been hailed for its brilliance and the unflagging liveliness of its narrative.

Beaverbrook and Churchill are now the last survivors of the governments that ruled the country in two world wars. "It must be nearly time for an accounting," Beaverbrook muses. "I must have my late night final before long." The contemplative pause lasts but a moment. Then he presses a button and reaches for the phone, in the whirlwind of activity that marks the centre of a great, lively newspaper empire.



Passing Thoughts

"APHORISMS for an age of anxiety"—thus Clifton Fadiman, in his introduction to an English translation of *Unkempt Thoughts*, describes the piercing epigrams of Polish satirist Stanislaw Lec. For example:

You have to climb to reach a deep thought.

Thoughts, like fleas, jump from man to man. But they don't bite everybody.

You will always find some Eskimoes ready to instruct the Congolese on how to cope with heat waves.

Is it progress if a cannibal uses a knife and fork?

ONE WOMAN'S WORLD

By Lesley Conger

Sometimes life gets so cluttered with extravagant and highly-advertised pleasures that our senses become dulled, things we might otherwise relish with a lively enjoyment slide past us unobserved. Sounds, for instance. Here are some I like:

A boy alone, laughing in the next room. Soapsuds, when the last of a sinkful goes down the drain—*thush!* A distant lawnmower on a summer evening—*after* you have mown your own lawn. The sudden silence after the children fall asleep, and then—surprise!—the clock ticking.

Reassuring sounds: the familiar car engine, the familiar step on the porch. Luxurious sounds: the coffee perking on the stove, the fire sniggering and chuckling in the fireplace.

A come-and-get-it noise: the paper rattling through the letter-box. A noise to make you hold your breath: the hustling, rustling, hurrying whisper of tissue paper when you don't know what's inside.

A sound for beachcombers: the prickling-spickling little wet noises of the tide flats—seaweed popping, gravel shifting, crabs scuttling—a constant chorus of minute voices. You have to be very quiet to hear it.

Shhhh—just listen!

Failure is frightening, but failure that follows attempt is better than no attempt at all. One should, however, attempt on a grand scale. Too many small attempts diffuse one's energies, and while small failures are less obtrusive than grand ones, they are also less excusable and more dismal—and small successes are only a shade better. *They* can become, in fact, a cosy trap, a comfy, padded, reassuring dead end; the small succeeder goes through life never failing at anything, for he knows exactly what he dares to attempt and thus achieves one cheap victory after another.

Lesley Conger is a university graduate who has seven children, a professor husband and an assortment of pets to cope with. She still finds time to do her own housework, to read prodigiously and to write books.

I would rather have the courage to fail magnificently than the prudence to choose endeavours in which I am certain of only minor success.

I WONDER why people always comment on the saintly serenity of nuns and monks who live in bare little cells shut away from the world. Where is it easier to be saintly and serene? The *real* test of saintliness and serenity is to maintain them out in this complicated and frustrating world.

A QUESTION of morals: Is it more wrong to steal from a little old lady on a pension than to steal from a big, fat, glossy company with Ltd. after its name?

Put aside for the moment all consideration of how much the victim is hurt by the crime; put aside your long-standing regard for Robin Hood. Consider, in its simplicity, the well-known Commandment: *Thou shalt not steal.* That's all it says. It doesn't say Thou shalt not steal from the poor. It doesn't say Thou shalt not steal except from large companies which can afford to be stolen from and are covered by theft insurance.

The crucial thing to remember is that *every act of dishonesty has at least two victims:* the one we think of as the victim, and the perpetrator as well. Each little dishonesty—regardless of its victim, be it a helpless widow or the bus company—makes another little rotten spot somewhere in the perpetrator's psyche.

SOMEONE WHO surely must be one of the gloomiest of modern men once asked sourly in a letters-to-the-editor column, "How can any intelligent man find joy in today's world with the threat of the hydrogen bomb hanging over us all?"

I can't let that mention of The Bomb go by unremarked, and the remark I want to make is that I am not really afraid of it. This is not because the danger is not real; nor is it because I take it lightly. No, I refuse to be afraid because I regard all large and overwhelming fears as destructive. I am afraid of many things —of motorway traffic, of social formalities, of big spiders, of electricity, of calories, of disappointing myself. And, like all mothers, I am more afraid of something happening to my children than I am of anything happening to myself.

The world has never been so placid as not to need a few Cassandras. But must we all stand about crying, "Doom! Doom!" in a gloomy chorus, drowning the song of birds and the rustle of leaves? There are guided missiles in the sky, but also there are stars. There is international tension, but there are also laughter and love. The intelligent man must cherish joy and cultivate delight, and he must pass these aptitudes to his children. Otherwise we will never preserve what we love.

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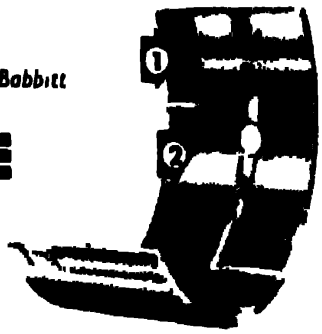
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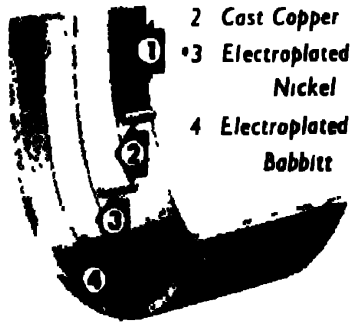
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It's Tough to Be a Teenager

Growing up is the most difficult and rewarding job a human being will ever have. Here are some useful pointers, designed to help adults help adolescents.

By Joseph Phelan, *Executive Director of Children's Village, as told to Ralph Lee Smith*

A FUNDAMENTAL fact of adolescence—one that lies at the heart of so much behaviour that adults find baffling—is this: on one hand, the teenager wants to be a child; on the other, he wants to be an adult. For a youngster to grow up normally, the desire to be an adult must gradually predominate and win. But many things can thwart this desire.

We see this again and again in our work at Children's Village, where for years we've been changing rebellious adolescents into law-abiding, responsive young citizens. The problems faced by these often delinquent teenagers are simply exaggerated forms of the problems faced by all teenagers. As Sigmund Freud said, "The lines of cleavage are in every crystal, but you don't see them until the crystal breaks."

Consider 13-year-old Joey. Joey was sent to the Village by the Children's Court after he had altered his mother's pension cheque from 50 dollars to 56; he spent the difference.

The 113-year-old Children's Village at Dobbs Ferry, New York, helps emotionally disturbed—and therefore frequently delinquent—nine- to 15-year-old boys sent by courts and welfare organizations. There 300 youngsters live, go to school and receive clinical treatment, with each child's activities individually prescribed for him. Average stay is 28 months, and four out of five youngsters keep out of trouble when they go home.

This act was one among many—all of which added up to a do-and-don't-want-to-grow-up conflict.

At school, Joey picked fights with other boys to show that he was a "man." But he was careful to choose boys who were smaller and younger so that he could be sure to win. He boasted about his prowess with the girls—but "fell" only for older girls who wouldn't look twice at him. When he first arrived at the Village

Condensed from Parents' Magazine

he constantly wanted to telephone his mother. She visited him frequently, bringing bundles of food.

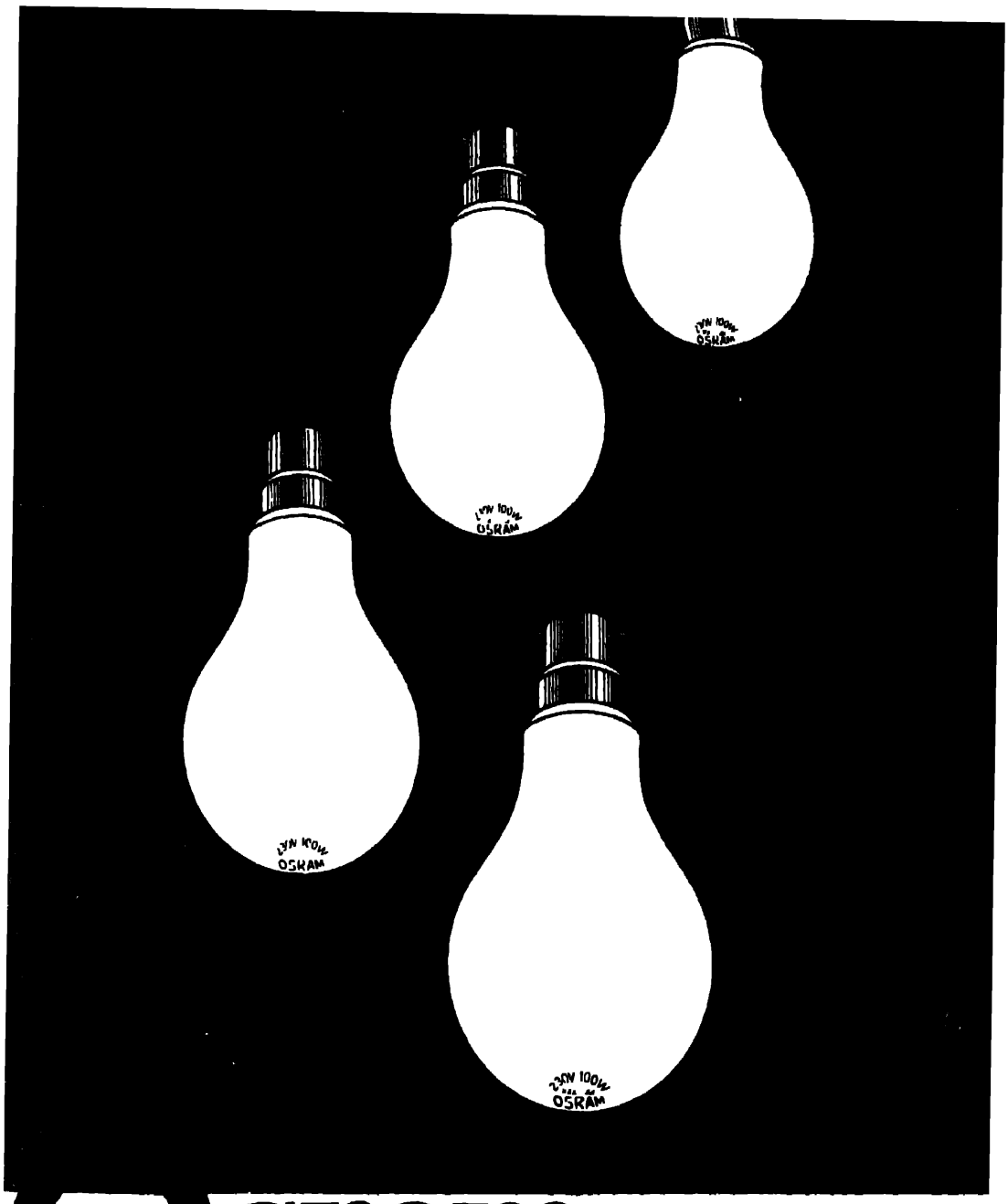
When we got at Joey's difficulty it was this: Joey's father had deserted the family, and his mother, without realizing it, was trying to keep the boy from growing up and leaving, too. As for Joey, it was extra important for him to get along with his mother, since she was the only parent he had. So he behaved like the baby she wanted him to be. This, of course, undermined his normal desire to grow up. When we gave him the kind of masculine attention he had been missing all his life, taught him to skate, sent him on a week-long camping and canoeing trip, he began to grow up.

Reasonably predictable behaviour on the part of parents, so that a child knows what to expect, is another decisive factor in fostering a teenager's growth. When parents are unable to decide what they are trying to teach their children, what they expect of them, the youngsters are left to become the decision-makers. But, of course, they are unqualified to play that role, and in their deepest selves they don't want it. More than anything else, teenagers want parents to be parents. Youngsters are lost without adult models to follow.

Of course, any parent knows that it's impossible to maintain a consistent approach on all questions. I would like to suggest a good rule of thumb for making judgements. When a youngster wants something very badly—a privilege, a special concession—ask yourself if the child wants to be indulged in a babyish way or if he is reaching for adult behaviour and responsibility.

A wise mother I know has a 16-year-old daughter who recently received an invitation to spend a week-end at a boys' college. Normally this would be against the family rules. But the mother sensed that the girl was deeply anxious to prove her responsibility. Good arrangements were made and the exception was granted. The girl was deeply grateful, not merely for the wonderful week-end but even more for the pleasure she gained because her parents treated her like the adult she was trying to be.

As for rebellion, it's natural. You'd have more cause for concern if your teenager son never rebelled than if he does. At Children's Village newcomers are often burning with excessive rebellion. They promptly set about doing whatever they think will get a rise out of us. One boy who came to us recently had been too much to handle at six foster homes. He had never known his father, had seen his mother only intermittently. He had earned his way in the gang world by vicious use of his favourite weapons—a pair of iron spikes. Soon after he arrived he tried to build a bonfire in the cottage to which he had been sent. His cottage father intercepted him, and, after extinguishing the flame.



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handed the boy a cigarette. "Use your matches to light this," he said.

After the boy got over the shock of his cottage father's unruffled reaction, he was told that he couldn't go with the other boys on an excursion planned for the following day. It was explained to him that trying to light a fire had endangered the safety of others. The punishment, calmly administered and explained, was a new twist to the boy, a help to him. Too often, all that children learn from punishment is what makes grown-ups angry.

If a parent falls into the trap of letting a teenager's rebellion get his goat, he will find himself playing a teenager's game to no one's profit. When a girl calls her mother an old-fashioned prude, or worse, it's childish of the mother to respond with hurt feelings, or for the father to shout at the daughter, "That's no way to talk to your mother!" Rather, it's time for mother and dad to have a quiet conference. They may need only a little more sense of humour. For these electrical discharges from teenagers often cease when they meet a non-conducting force.

Also important to growth is an opportunity for meaningful giving. Such opportunities for children are no problem in newly-established communities, and it is interesting that juvenile delinquency is rare in such places.

A teenager may be able to make a real contribution to the family's welfare by working and saving to help pay for his university education—an increasingly serious financial burden. Participation in school and community projects that depend on the youngsters' work and initiative is valuable. Whatever the work, its real worth is the key to its meaningfulness.

The adolescent also needs to experience the quality of grown-up excitement: concern with the issues of our time, with art, music and all forms of creativity; appreciation of nature and the pleasures it can offer us.

Parents who keep their sense of excitement, who reach out to the world instead of retreating to purely private interests, who take a firm stand on community and national controversies, provide an example to offset the meannesses and injustices of life that every youngster meets as he grows up.

This is the most precious parental gift of all—showing your teenager by the way you live that the world has ever-expanding horizons. Give a boy or girl a sense of adventure, wonder and courage, and you have given him the light and the strength he needs for maturity.

A BIG-GAME HUNTER, on safari, disappeared from camp. After a few days his friends concluded that something he disagreed with had eaten him.

—Contributed by Philip Humphrey



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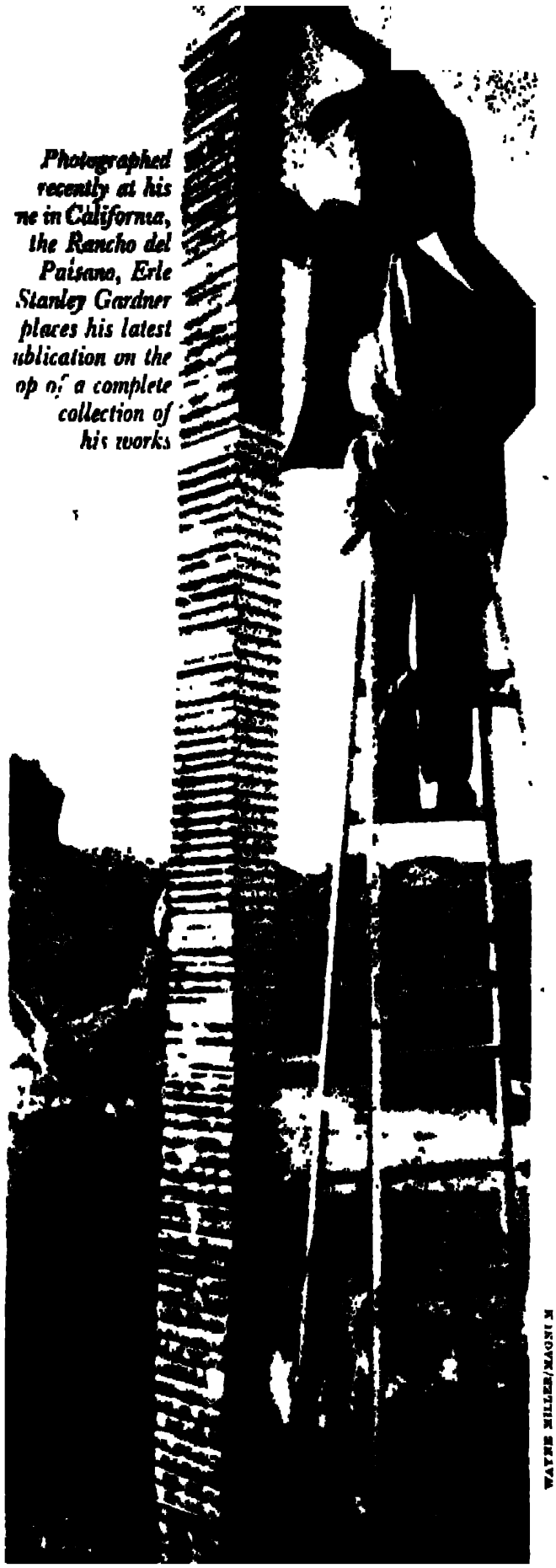
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Photographed recently at his ne in California, the Rancho del Paisano, Erle Stanley Gardner places his latest ublication on the op of a complete collection of his works

WALTER SILLER/KEYSTONE

The Case of Erle Stanley Gardner

Behind the world-famous figure of Perry Mason stands one of the most prodigious and indefatigable authors ever known

By Ben Hibbs

ERLE STANLEY Gardner, who 30 years ago invented Perry Mason, is one of the world's most popular and prolific authors. So great is his output that frequently he refers to his 3,000-acre ranch in Southern California as "Gardner's Fiction Factory." This materialistic approach to literature may horrify a few sensitive writers, editors and critics, but

it delights Gardner to remind them of the more practical facts of their trade.

"I am loud and raucous," he says. "I say what I please." He is and he does. He has been sticking out his tongue at the world all his life. At the same time, his fierce sense of justice, which has led him to battle compassionately for the downtrodden and the unfortunate, has made him hundreds of friends who love him dearly.

The Gardner place—Rancho del Paisano—is indeed a factory. Mysteries, other books, articles and a vast correspondence flow steadily from its assembly line. Television scripts come and go. Over 100 Gardner books have been published, more than half of them Perry Masons. Gardner also writes a series of mysteries under the pseudonym A. A. Fair, and for fun he turns out an occasional non-fiction, lavishly illustrated book about his explorations and adventures in Mexico or in the deserts of the American South-West.

Approximately 150 million copies of Gardner books have been sold in 20 countries, perhaps treble the number that can be credited to any other living writer. Although, at 74, Gardner is now slowing down a bit, he is still under contract to deliver four Perry Mason books and two A. A. Fair books each year. He can turn out a crisply written, full-length mystery story in one month—often less. This leaves the time he wants for other activities, including hobbies and sports, as well as his successful and durable Perry Mason television show. [This is watched by viewers in 34 lands.]

Gardner's ranch is situated in the semi-desert country 100 miles south-east of Los Angeles. On a wooded slope with the desert valley stretching away in front and wild, beautiful mountains rising steeply at the rear, is a helter-skelter collection of buildings. The centrepiece of the ranch is a long, rustic redwood building with a great-windowed sun-room looking out on to the valley and the snowcapped mountains beyond.

The last time I counted, there were ten structures for human habitation, plus a miscellany of garages, sheds, workshops, fireproof manuscript vaults, and several caravans parked under the trees. One building houses Gardner's office and sleeping quarters, his excellent libraries, his collection of mementoes. In another rambling structure, six secretaries pound typewriters, answer telephones, transcribe Gardner's booming voice from tapes—he dictates everything—and try to keep his varied and intricate affairs sorted out.

A staff of 18 looks after Gardner and runs his household. Married in 1912, he and his wife have been amicably separated for years; she lives near their daughter and two grandchildren.

Erle Gardner was born in 1889 in Malden, Massachusetts. His father,

a mining engineer, moved the family to California while Erle was still a youngster. Erle, a free soul, was kicked out of the local school for unpardonable pranks and finished his schooling in a distant town. He never went to college, but read law in attorneys' offices and was admitted to the bar. He practised law in Oxnard, California, and his speciality was defending the underdog. This wasn't very profitable at the time, but it did give Gardner a vast background of court experience—replete with legal gimmicks —on which to draw for mystery plots.

After several business ventures, he tried his hand at writing. He sold a concoction called "The Shrieking Skeleton" to a mystery magazine for 160 dollars, in 1923, and then began to deluge the magazine offices with novelettes at the rate of three or four a week. Gradually he dropped his law practice.

At his publisher's suggestion, Gardner invented Perry Mason, the ingenious attorney for the defence, who always wins his cases, always solves the murder, usually in a final dramatic courtroom scene. With the first Perry Mason story, *The Case of the Velvet Claws,* published in 1933, Gardner's rise to fame began.

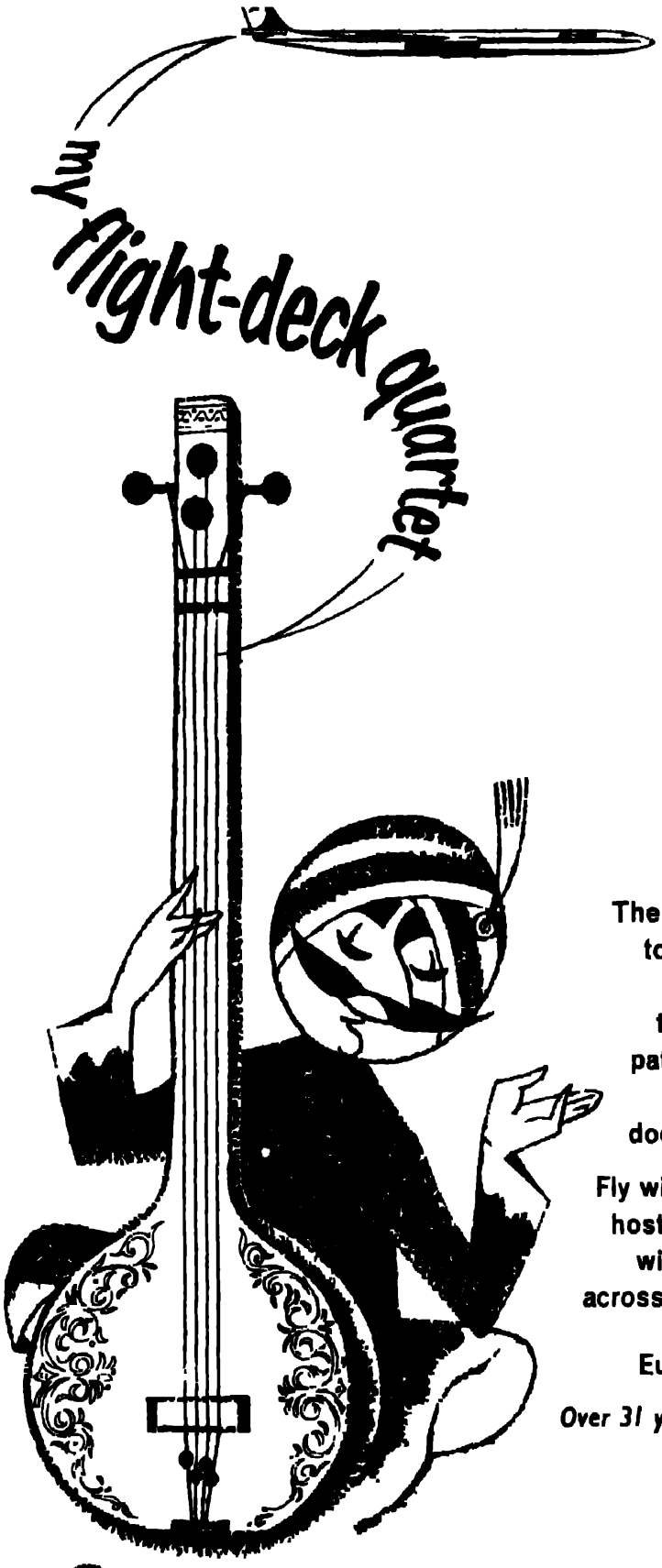
When television came along he refused all offers, perhaps because of a bad early experience with films. Finally he formed his own company to put Perry on the air. Television with its voracious appetite soon ran through the published stories, and a team of writers took over. But he keeps tight control of all scripts. Nothing can be used without his full approval.

Recently I listened while he dictated a long letter to the television writers, taking apart their script—particularly the courtroom scene—line by line. Sometimes a script makes as many as five trips back and forth between the ranch and Hollywood before it satisfies Gardner.

Today Gardner is regarded as an authority on penology and criminal law—particularly courtroom procedure. He knows scores of judges and prison wardens, and frequently visits prisons, talks to inmates, tries to help some of them when they come out. He campaigns relentlessly for more enlightened methods of rehabilitation in U.S. prisons.

This activity in the field of crime led to a spectacular project called "The Court of Last Resort," which resulted in headlines and legal fireworks for more than a dozen years. The "Court," which got under way in the late 1940's, was originated by Gardner and Harry Steeger, editor and publisher of *Argosy,* who backed it solidly with space in the magazine and large sums of money for investigation expenses.

The two men recruited a group of professionals in criminal investigation, who through the years donated their time and fought the



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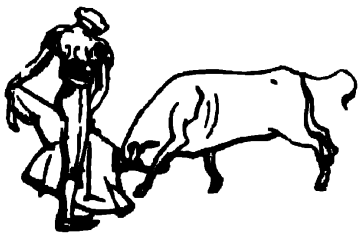
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battles of men who, they believed, had been wrongly convicted of crime.

Their purpose was to dramatize in print, with actual cases, the defects of the system of criminal jurisprudence. In so doing, they managed to get a score of men released from prison.

"Inevitably," Gardner says, "the 'Court' emphasized only one side of the miscarriage of justice. Many men *are* convicted of crimes they did not commit, and it was these cases we dealt with. Actually, however, there are more wrong acquittals than wrong convictions—but of course we couldn't reopen the cases of men who had been set free without falling foul of the libel laws. Even so, I think we did some good."

Probably Gardner's most satisfying case was that of a Michigan man we shall call Tom Jones, in prison 26 years for murder. Jones, who admittedly had been keeping bad company, was convicted in 1924 of killing the owner of a speakeasy in a hold-up as the man left a bank with a large sum of money. Jones's sister appealed to Gardner and his associates. Studying the case, they became convinced that Jones had been found guilty largely on the basis of a dubious eyewitness identification.

Following a trail 25 years old, they found the key eyewitness, who by now was willing to state under oath that all he saw, from 100 feet, was three men running away, and that one merely looked "something like" Tom Jones. Out of the long-ago past they also produced another, closer eyewitness ' who had never even been questioned by the authorities. He said flatly that Jones was not involved.

Working through a sympathetic judge, the "Court" finally won an opinion that Jones should have another trial. The prosecutor, studying the new evidence, decided he had no case, and Jones, by then a man of 50, walked out of prison a free citizen. He subsequently became a successful and respected businessman.

During the "Court's" most active years, Gardner devoted more than half his time to it and spent at least 25,000 dollars of his own money on expenses. And when a television programme, based on the cases, was shown one season, he ploughed his own fees as the show's adviser back into "Court" projects.

Within the past few years, to conserve his strength Gardner has had to stop his "Court" work. Yet he can't quite give up his battles for the underdog. Indeed, people won't let him—they are always seeking his help.

"Although injustices still occur in the courtroom," Gardner says, "I think there has been improvement over the years. Most prosecutors are conscientious men who try hard to determine the truth. And it may surprise some of my readers to know

that on the whole I also have a deep respect for cops. Sure, Perry Mason always triumphs over the police—that's the pattern of those stories. Yet there is nothing that can replace the hard, methodical investigation of good police officers in solving a crime. Moreover, although it is true that juries sometimes make mistakes, I am a firm believer in the jury system."

The murder mystery has long been one of the most durable forms of fiction. Why? In the first place, Gardner says, people derive a moral satisfaction from seeing the innocent victim of circumstances triumph over the evil forces surrounding them. Secondly, a properly written detective story is stimulating mental exercise. Finally, it is a form of narrative that, for many millions of readers the world over, is sheer fun.

Touring the Continent

OFFICIALS in Cannes decided to shorten the airstrips at the new airport. The town wants to discourage flights of noisy jet planes. Motto: "Fly to the airport of our neighbour Nice, then come to Cannes to sleep in peace." —*L'Espoir*, Nice

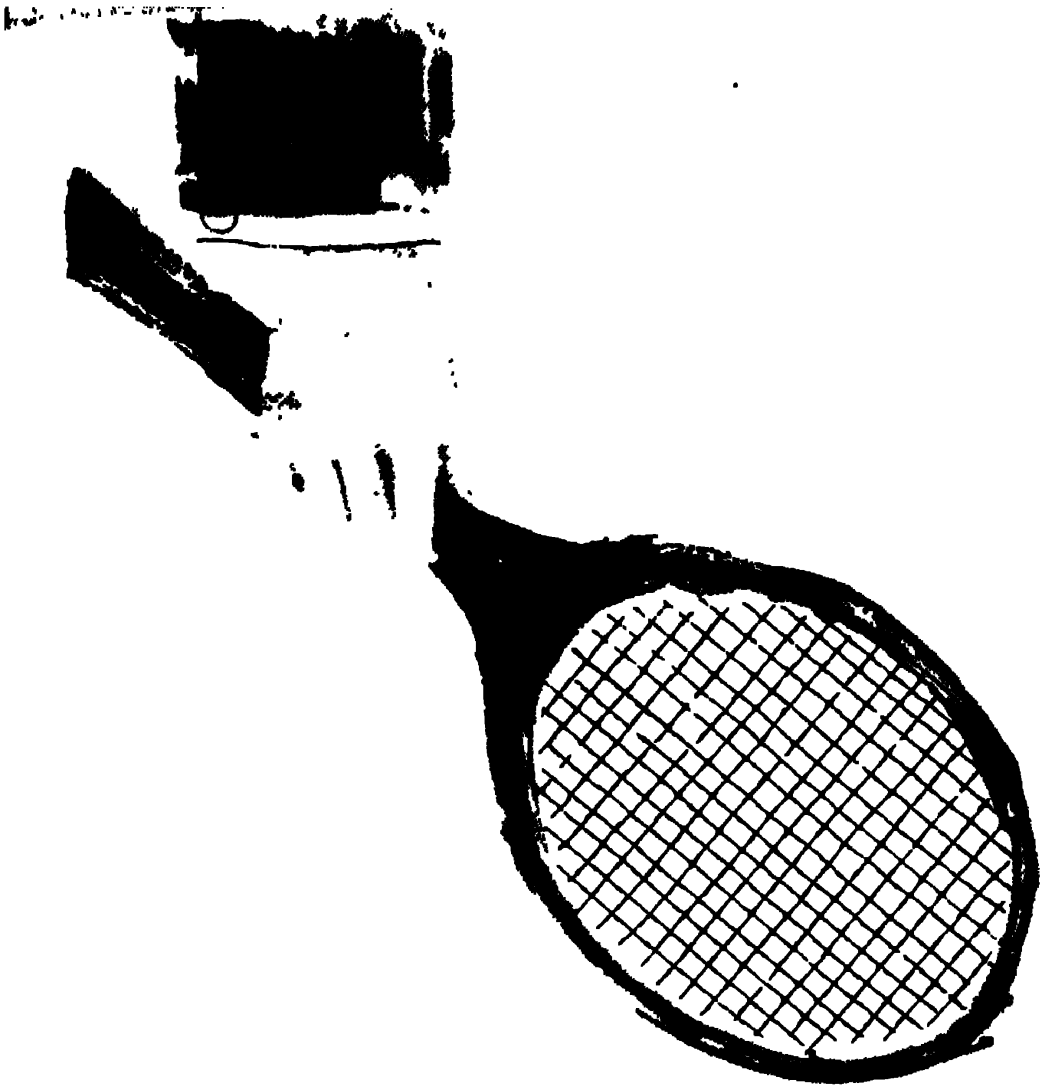
HOTELS in Innsbruck display their room rates openly for the public to see. The signs list season rates and off-season rates, but below them is a warning: "This year the season will begin on Jan. 1 and end on Dec. 31." —Graz, Austria, *Neue Zeit*

Facts and Figures

A SCIENTIST has worked out a quick way to determine whether you are too fat. Dr. Norman Marshall, metabolic researcher for a drug firm, advises you to forget about pounds and use this formula:

Calculate your height in inches, then subtract your waistline measurement. Marshall says a difference of 36 is normal, 38 indicates a tendency towards leanness, and 33 or less indicates obesity.

Men, he says, should use the formula with their shoes on, women with their shoes off. —AP



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SPECIAL REQUEST FEATURE

This article, about a popular but dangerous hobby, appeared in the March 1952 Reader's Digest. Its republication has been requested by Loretta Young, whose film performances have made her known to millions

ARE YOU A GRIEVANCE COLLECTOR?

By I. A. R. Wylie
Author of "Keeper of the Flame" "Storm in April," "Where No Birds Sing," "My Life With George," etc.

A CROSS-LOOKING little girl sat on the doorstep of a London back yard and glowered into space. It was her fourth birthday, but unfortunately her parents—preoccupied with the chronic problem of how to meet the rent—had not remembered it until late in the afternoon.

All promises of atonement were coldly rejected. She went to bed, hugging her grief. Not for all the birthday presents in the world would she have admitted that she had been enjoying herself hugely. She had been the heroine of a heart-rending tragedy. And she had been getting an emotional stranglehold on her parents that would cover her own transgressions for many a day.

That little girl is still vivid to me. Like far-off but still clear vibrations I can feel her sufferings. She is, I have to admit ruefully, myself. For I can still enjoy a good wrong. I can still persuade myself in self-indulgent moments that I have been snubbed, misunderstood or unappreciated. The only difference is that I am now, to some extent, wise to myself. I am also wise to my friends when, for no apparent reason, they retire to heights of gloomy aloofness.

It takes forthright character to

come straight out and say, "Why didn't you ask me to your party? I'm your best friend. And I'm hurt." (The answer might be so reasonable that my grievance wouldn't have a leg to stand on and would inevitably fall flat.)

The majority of us go about with a lofty, frozen air of hurt which gets loftier and frostier as the offender lamentably fails to recognize and admit his offence. But sooner or later we forget what had so grievously offended us or admit privately that we were just indulging in a first-class emotional spree.

Grievance collectors can be of any age. But I think they all start young. The primary urge may spring from a temperamental inclination towards self-dramatization.

In my school days I remember a teenager who seemed to hate everyone in her class. She rejected our probably half-hearted overtures of friendship. And at regular intervals she ran away from home. Her classmates were made to feel responsible for this: we had been unkind; we hadn't invited her to share in our games; we had even bullied her.

The victim of these injustices was an idolized only child. Too much indulgence by her parents had made her incapable of adjusting herself to the ordinary rough-and-tumble of school life and given her an unwholesome craving for adulation. She wanted to be the most popular girl in her class, but she would not take the necessary steps towards her goal. She wanted privileges handed to her on a silver dish; because they were refused her on her terms, she compensated with grievances against us all.

I don't know what became of this girl, but she may well have grown into the sort of woman who was once my next-door neighbour. A low wall divided our back yards which, in defiance of poor soil and sooty city air, we were trying to make into gardens. So we occasionally exchanged greetings and advice. I soon found that every comment I made was met with some bitter, nagging complaint. Either there was too much sun or my one tree was throwing too much shade. She had been sold inferior bulbs. Her children trampled down her flower beds.

One day, in exasperation, I said to her, "If you ever admitted that anything had ever gone right with you, I should fall in a dead faint." She never spoke to me again. I had tried to deprive her of her one great satisfaction—her grievance against life itself.

Sometimes a grievance collector faces the truth in time to avert disaster. I knew a woman who, being widowed early, had done a magnificent job of bringing up her only son. She sacrificed and worked desperately hard to give him a good education. Until he graduated she was his best friend, and he adored her. Then he grew up, began to go his own way, fell in love.

She couldn't accept the natural

change, but complained of her loneliness and his neglect. She criticized his girl. Everything he did to appease her only fanned the flames of her imagined grievances. Torn between his love and gratitude and his legitimate needs and aspirations, he began to dread the unhappy encounters with his mother. He quarrelled with his girl. His work deteriorated.

In the nick of time a friend took the mother in hand. She was intelligent enough to face the truth and bravely cut the "silver cord" which was emotionally strangling her son and herself. She left him to work out his life, free and unfettered. And she now has her reward: she is a self-sufficient, welcome and happy grandmother.

Even those of us who are not collectors often have a pet grievance which we rarely have the heart to toss out of its niche. My own pet relates to my profession. When a novel of mine comes to publication, I usually discover that my publisher has once more let me down: he hasn't advertised it the way he should. As for the critics, they haven't even read the *opus,* or they would have given it more respectful attention. The public is either misled by the booksellers or just plain ignorant; otherwise my book would be a best-seller.

Only by a great emotional effort do I bring myself to admit that the great work which cost me so dearly in time and thought isn't, after all, so great. Once I've made that acknowledgement, some of the fever goes out of my hurt. Instead of brooding over my grievance, I try to give my mind to writing a better book.

We all know someone who is convinced that his boss discriminates against him, that his good work is unrewarded. He never acknowledges to himself that he is getting just about what his ability and energy deserve. If he gave his work the ardent concern that he gives apparent slights and injustices, the chances are that he wouldn't have any grievances to brood over. If we think we are not appreciated, it is a good idea to ask ourselves the simple question, "Why?"

Some of us nourish a chronic grievance against what we call our "luck." It seems to me that people who complain that they are "unlucky" have some defect in themselves which in some way contributes to their misfortunes. I have come to recognize that my own bad breaks are related to the bad spots in my capacity and character. That recognition is apt to cramp the style of any incipient grievance.

Those who seem to have a legitimate complaint against fate—the blind, the crippled, the apparently disinherited—are the least likely to complain. Pushed to the wall, as it were, they often face about and meet their disabilities as a test of their true, inner worth. They do not unload bitterness and resentment



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on innocent friends and neighbours.

There is a cure for the grievance-collecting fever. It is quite simple and, like so many apparently simple things, such as loving your neighbour as yourself, it is not easy to administer. Still, when you feel your temperature rising, give the cure a fair trial. Take yourself by the scruff of the neck, put yourself in the witness box and conduct a ruthless self-examination.

"What, Witness, have you put in the pot that you should expect the best bits ladled out to you? What have you done for others that you should expect such tender consideration from them? Are you really as clever and as good as you think? Who and what are you that you, alone of all men, should be spared pain, neglect, injustice?"

Force yourself to look your grievances in the face. People are not normally unkind or unjust. The apparent neglect or snub can almost always be traced to inadvertence, preoccupation or just sheer clumsiness. Evaluate the grievance, then toss it out of court. Do not let it sink unresolved into your subconscious, to breed like poisonous bacteria in your emotional bloodstream.

Even if you have a genuine grievance, don't put it in a glass case and gloat over it. Believe me, you will travel with a lighter heart and surer foot without it.

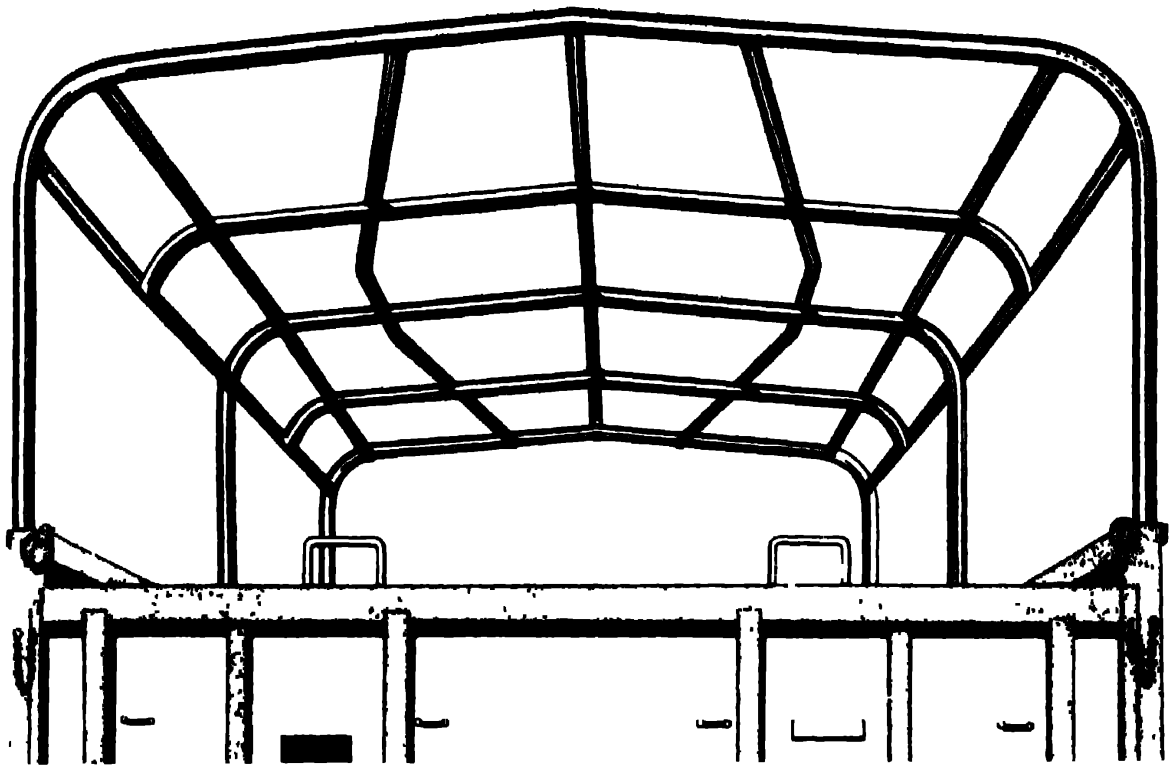
Brought to Book

When Hitler began his notorious book burning, William Foyle, of London's world-famous bookshop, sent him the following telegram: "Can offer high prices for all banned books. Do not burn them. Will you negotiate?" The *Fuehrer* did not reply, and Foyle got his revenge by using unsold copies of *Mein Kampf* instead of sandbags to reinforce his roof during the blitz. —*Publishers' Weekly*

In one of his books, novelist James Branch Cabell mentions a judge who had said unfriendly things about him. After the judge's name is an asterisk, and—at the bottom of the page—the footnote reads: "Nothing whatever is known of him." —E. P.

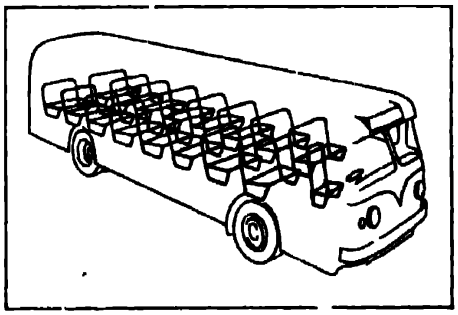
Life's Blood

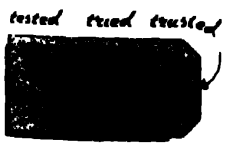
Nearly every film actor, writer and director has an agent, whose ten-per-cent fee is a fact of life as inevitable as death and taxes. Consider the writer who was giving blood to the Red Cross. As the blood flowed into the tube, he exclaimed, "Don't fill it all the way up! Ten per cent belongs to my agent." —A. J.



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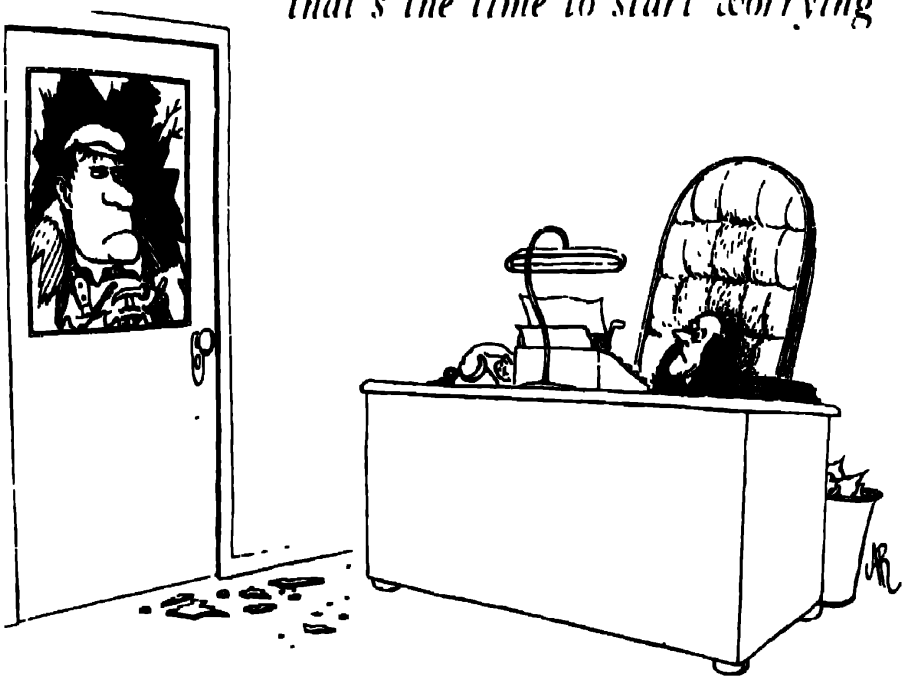


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I'VE SLIPPED MY MIND

When you start forgetting that you're forgetful—
that's the time to start worrying



By H. Allen Sm

Not long ago I heard of an ageing gentleman named [illegible] Dewhirst who was a guest at a dinner party in the home of a certain Lady Baggley. During the dinner Mr. Dewhirst fell under the illusion that the party was being given in *his* home, and that *he* was the host. He turned to Lady Baggley and in a loud voice said, "I'm quite upset about it, but really, my dear, this is a wretched dinner." His hostess drew back as if someone had slapped her across the face with a Dover sole. Before she could utter a word, Mr. Dewhirst continued, "I must explain that it's the cook's night out, and this sickening mess

was churned up by the kitchen maid, who deserves to be stoned in public. I'd recommend you not to eat any of it."

I don't know what happened afterwards. I don't want to know, and I was not amused—for it brought to mind a series of things that had recently been happening to me.

On two different occasions within a single week, I locked myself out of my office, leaving both keys inside. Each time I had to shatter a glass panel on the door to get back in. And each time I had to get a carpenter to replace the broken glass. The second time he came, I didn't like the way he looked at me.

During that same period, I picked up the phone and dialled a number. There were half a dozen rings at the other end, and then a man answered. During that brief passage of time I forgot whom I was calling. I should have been forthright about it and, employing the customary hollow laugh, explained my insane lapse of memory. Instead, I felt trapped and panicky, and said, "I must have dialled the wrong number," then hung up.

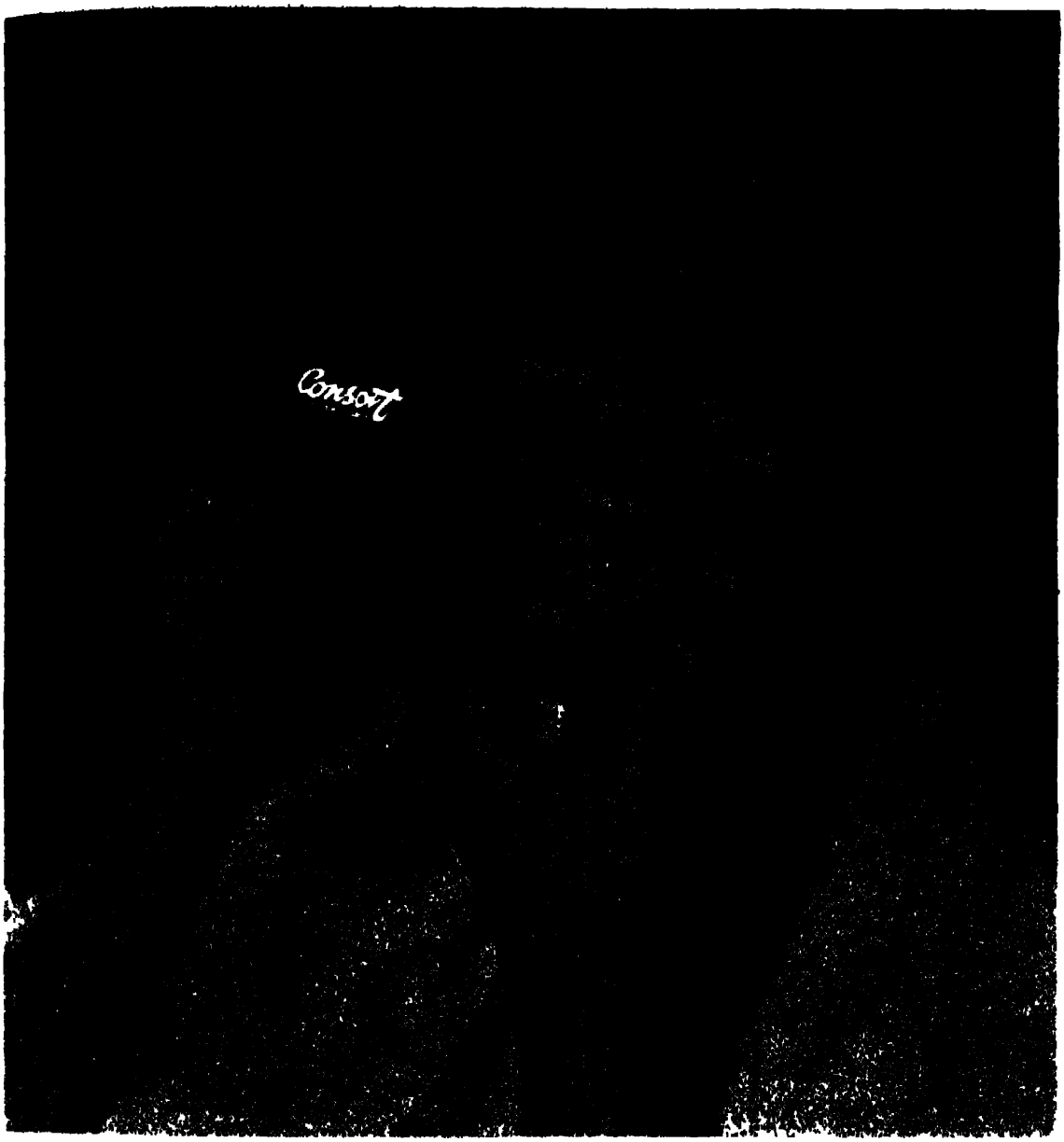
Soon after that, a letter came from a local woman asking me to perform a minor service for the committee of which she was chairman. Her letter somehow got shoved under a pile of old Brazilian sheet music on my desk, and a month passed before I encountered it again. I decided to make a clean breast of my dereliction. I telephoned the lady and began apologizing. "But," she broke in, "you *did* answer my letter. You wrote a very *gracious* answer."

By now I was pretty well convinced that my brain was shrivelling up like an aged potato. The worry continued to haunt me until one Saturday when my wife and I were invited to the home of Dr. Ferdinand Wake. We were going to sit about on the terrace for a few hours and then grill some steaks.

This Dr. Wake is widely considered to be a man of superior intelligence. He's a fine surgeon and buys books and paints in oils and grows gladioli and knows a great deal in the way of applied psychology. While he and I were alone on the terrace, I decided to tell him about my disintegrating mind—about locking myself out of my office, about the phone call to nobody, about the unwritten letter that was written.

He was most kind. "Your case," he said, "is a simple one and should give you no concern. If you know you're absent-minded, you're alright. If you're so far gone that you don't know you're absent-minded, you may be in trouble."

You can't imagine how that bucked me up. And there was more encouragement coming, much more. Dr. Wake gave me examples of absent-mindedness in some of history's most brilliant men. G. K. Chesterton, he said, often had to stop at a newsstand and buy a copy



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of his own weekly magazine, *G.K.'s*, to find out where his office was. Also, Chesterton once telegraphed his wife, "Am in Market Harborough? Where ought I to be?"

Dr. Wake said that Thomas Edison was standing in a queue one day to pay his taxes. When he arrived at the counter, he found that he had forgotten his own name. He turned to the man next in line and said, "Could you tell me who I am?" The man told him.

These anecdotes almost made me proud of my absent mindedness. But even greater moral support was in the offing. We talked for a while longer, then decided to drive to the village and get the evening papers. In the car, the doctor suddenly said, "There's a lot of it going around."

"A lot of what?" I asked.

"A lot of . . . a lot of . . . what was that we were talking about a while ago?"

"Oh," I said, "you mean absent-mindedness?"

"That's it," he said. "There's a lot of it going around."

We arrived in the centre of town, bought the papers and were about to start home when the doctor remembered something.

"She told me," he said, "to pick up . . . now, let me see . . . What the devil was it?" He stood there on the pavement rubbing his chin. At last his face brightened. "Got it!" he said. "Come with me." We walked round the corner to the ironmonger's, where the doctor bought a small can of machine oil. Then we drove back to the house.

Mrs. Wake was arranging the cooking utensils. Her husband handed her the little paper bag containing the oil. "Here it is, dear," he said.

She looked in the bag, then looked at him. "I told you," she said slowly, "a large block of walnut ice-cream."

Me? . . . I've never felt better in my life.

Blind Spots

A WOMAN inching through city traffic one morning struck up a conversation with a man in the adjacent car. Noting that it was 9.30, she remarked, "Well, I'm glad I wasn't in that 8.30 traffic."

"I hate to disillusion you," the man replied, "but this *is* the 8.30 traffic."

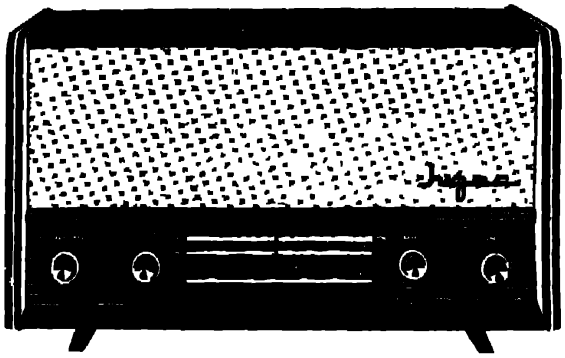
—N. S.

"ANOTHER woman driver!" my husband growled as a car cut in front of us on a busy main road. Later we drew abreast of the offender and saw that it was a man. Unrepentant, my husband observed: "His mother probably taught him to drive."

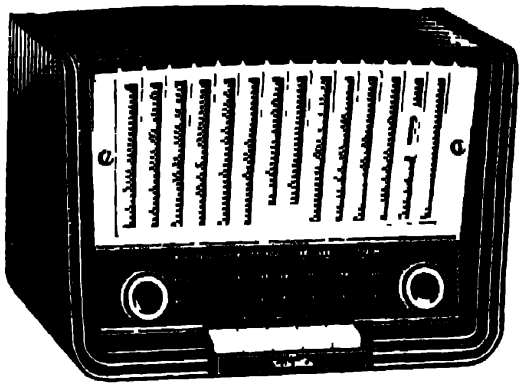
—D. J. W.

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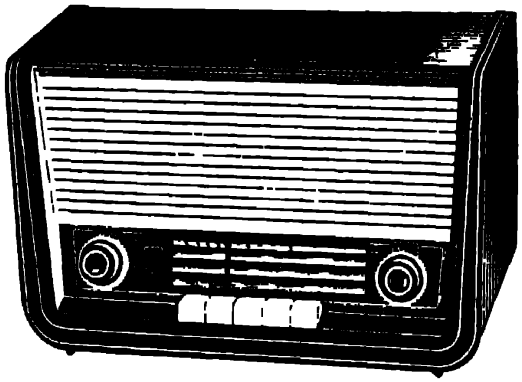
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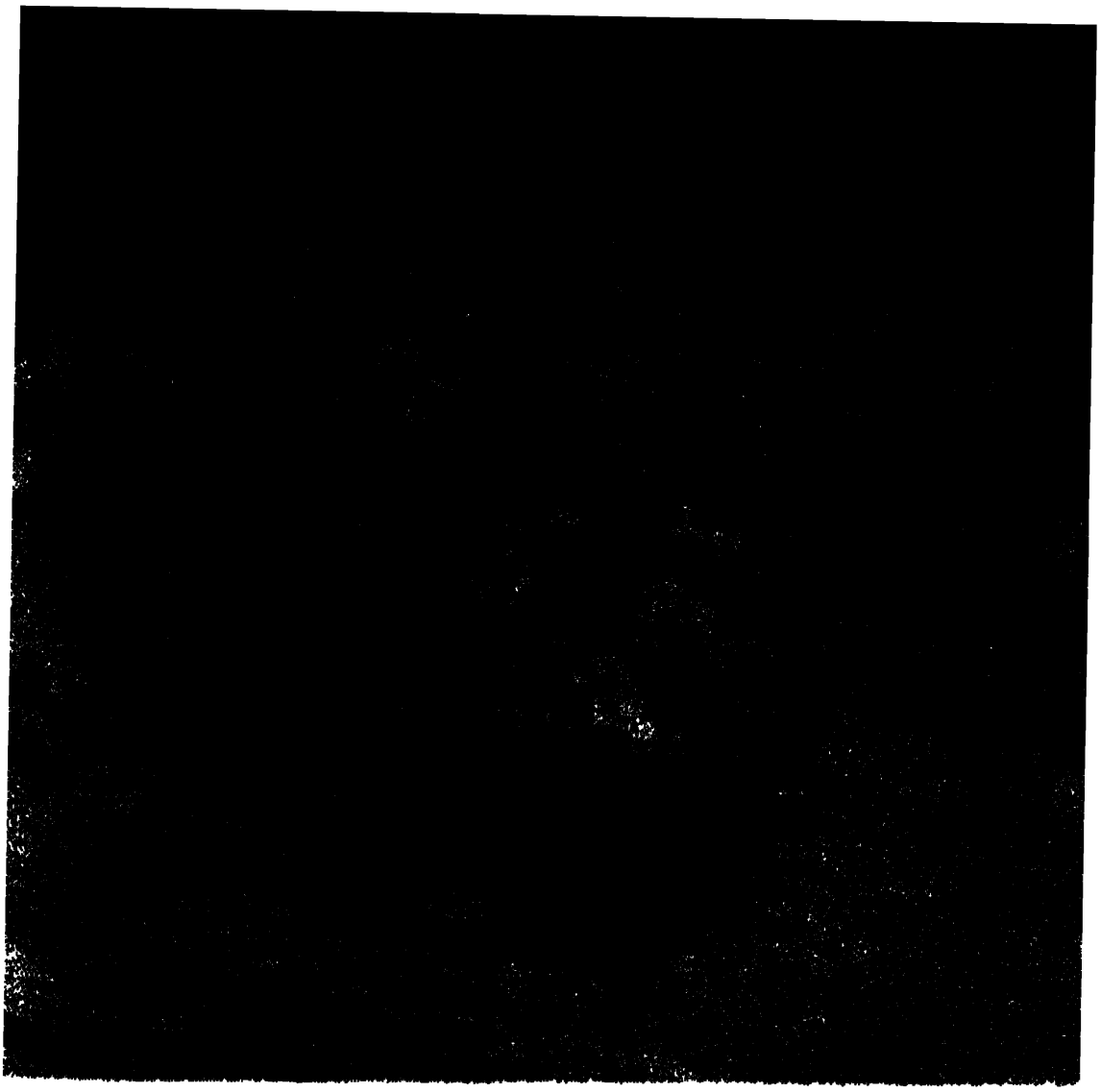
The Greatest African Explorer of All Time

When he died 60 years ago this month, Henry Stanley was world-famous and honoured as a man who had devoted his life to opening up the Dark Continent

By Donald and Louise Peattie

"August 15, 1879. Arrived off the mouth of the Congo. Two years have passed since my earlier descent of the great river. Having been the first to explore it, I am to be the first who shall prove its utility to the world. I now disembark my 70 Zanzibaris and Somalis for the purpose of beginning to civilize the Congo basin."

With this superb audacity did 38-year-old Henry Morton Stanley announce in his journal his plans for



a vast territory in what he himself had named the Dark Continent. Today better than ever we can realize the magnitude of his dream. The Congo basin is nearly a million and a half square miles of hostile country, much of it jungle, all of it furnace-hot. With a handful of men Stanley set out to tame it. The imprint of his name upon Africa has proved indelible.

Henry Stanley was born in loveless poverty in Denbigh, Wales. He was originally called John Rowlands, after the father who died soon after his birth. Abandoned by his mother, the child was soon boarded out in a foster home, where he remained until he was six. Then, since no money for his keep was forthcoming, he was taken to St. Asaph Union Workhouse, a grim home for the unwanted. There for nine years he was underfed and so frequently beaten that one day he turned upon cruel authority (a

sadist later to die in a madhouse), thrashed him into unconsciousness and fled over the workhouse wall.

He worked for a haberdasher, then for a butcher, and at last shipped as a cabin boy to New Orleans. In that city he fell in with a kindly merchant named Henry Morton Stanley, who informally adopted him and gave him his own name. After fighting for the South in the American Civil War, young Stanley drifted into journalism. He covered Red Indian forays in the American West, and was sent to Asia Minor as a correspondent. Brought to the notice of James Gordon Bennett, managing editor of the New York *Herald,* he was asked to cover a British expedition in Abyssinia (to release two British citizens). His brilliant reporting while there earned him a job as permanent correspondent for the *Herald.*

Then, in 1869, Bennett issued the order that was to bring Stanley renown. The young reporter was instructed to lead an expedition into the heart of Africa to search for the missing missionary, David Livingstone. A pure-hearted Scots pioneer in exploration and good works, Livingstone was widely known for his African journeys and for his fight against the slave trade. There was much agitation about his disappearance.

Bennett had decided to capitalize on this by sending Stanley to find the needle in the African haystack.

Assignments to cover other adventures on the way delayed him, but in 1871 Stanley put his expedition together in Zanzibar. It consisted of 192 men, only three of them white. They set forth across the wild savannah of what is now Tanganyika, in exhausting heat, over flooding rivers. Progress was hampered by mutiny and desertion, by smallpox, elephantiasis and other tropical diseases, and by shortage of food.

Undaunted, Stanley pushed on for almost eight months, until one day he heard of a white man not far distant.

On November 10, 1871, he reached the village of Ujiji, on the shores of Lake Tanganyika. There he came at last into the presence of a frail, grey-haired gentleman. Lifting his pith helmet as he approached, Stanley uttered the greeting that wed humour with history: "Dr. Livingstone, I presume?"

The veteran missionary rejoiced to see him. For four companionable months the two travelled together, Stanley learning both African lore and piety from the old man. But Livingstone would not leave Africa. He entrusted to Stanley all his papers, bade him good-bye, and was never again seen by white men.

Back in London, Stanley encountered both wild acclaim for his feats and loud doubts. His detractors declared that no inexperienced man could have gone where he claimed to have gone; they charged him with forgery of Livingstone's



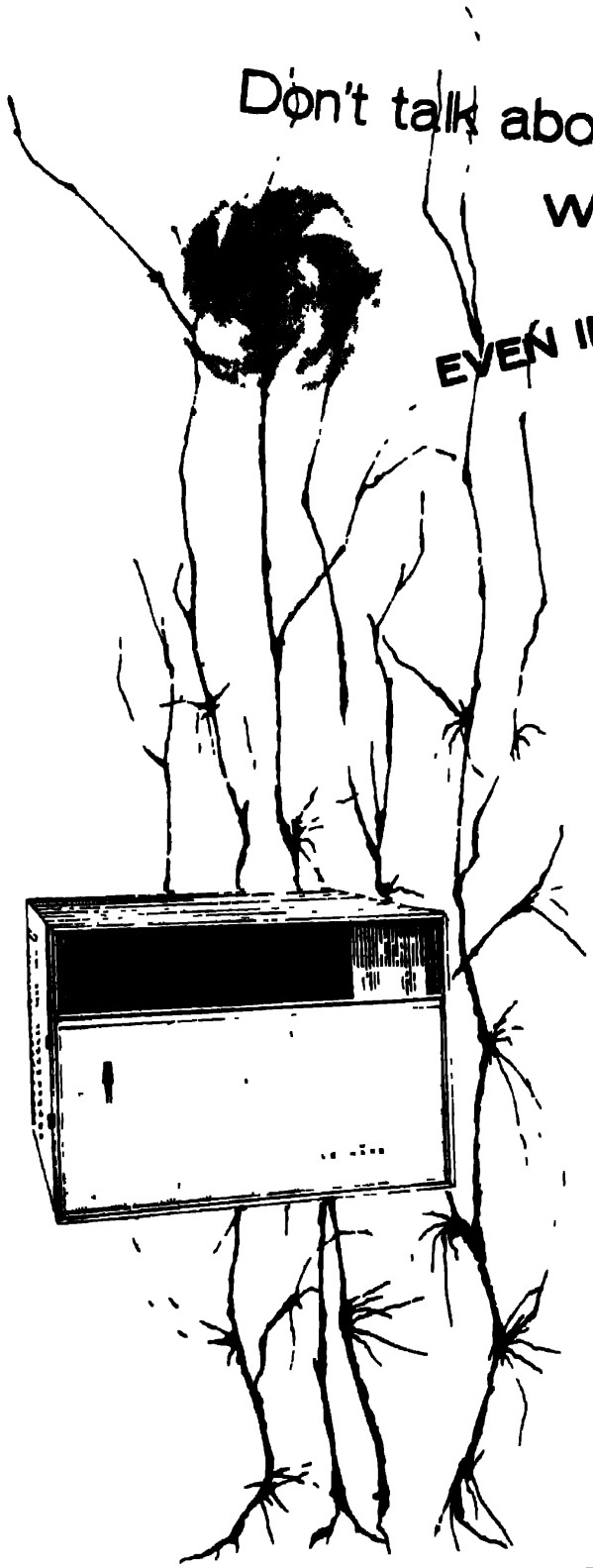
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papers. But the papers were authenticated by Livingstone's relatives, and honours prevailed, Queen Victoria herself sending a gift with her congratulations.

The course of Stanley's life had been determined by his meeting with Livingstone. The reporter now wanted to carry on the old man's work of opening up the continent by exploration, of bringing light to its peoples. He was to travel henceforth always with a Bible, and carry its word where he went.

In 1874, as head of an Anglo American expedition, Stanley explored the headwaters of the Nile, and circumnavigated Lake Victoria, its main source. He made a survey of Lake Tanganyika, and then launched his party down the waters of the unknown Congo, the second largest river in the world.

The perils he encountered turned his hair nearly white. His party was attacked by hostile tribes with poisoned arrows. Malaria, dysentery and smallpox laid low many of his men, and Stanley himself was racked with fever. His three white companions died on the way. On his return to Europe, emaciated, he was acclaimed as the first explorer to follow the 2,900-mile course of the Congo to its mouth. And he had crossed the entire African continent from east to west.

The spell of Africa was upon Stanley now; his ear heard ever the lure of the strange birds calling in the jungle. He remembered the untamed beauty of its people, their glistening ebony bodies fantastically adorned; he remembered the free wild beasts, the clustering jewelled butterflies, the orchids. Above all, he thought of the Congo as a challenge to civilization, for its tribes were in need of Christian light—and it was rich in rubber and ivory. Leopold II of Belgium also perceived the commercial possibilities of the Congo and, in 1879, Stanley led a Belgian expedition there.

For five and a half years he fought a vast region with the world's most debilitating climate and inhabited by several million hostile savages, many of them cannibals. He established 22 stations on the Congo and its tributaries, put four small steamers on the river. He built a road round the cataracts of the lower Congo that block navigation to the sea. His own back was bent to the task. Watching him wield a sledge hammer, the Africans gave him the name of *"Bula Matari"* ("Breaker of Rocks"). It was to cling to him always.

When he returned to civilization, Stanley was world-famous. He lectured widely and wrote at length.* His adventures crowd the pages of *How I Found Livingstone, Through the Dark Continent* and *The Congo and the Founding of Its Free State.* But he remained a lonely, restless figure, and 1887 found him again on his way to

* See "The Rock Breaker," The Reader's Digest, October 1962.



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Africa, in charge of a complex mission.

The Sudan, a wild and barbarous million square miles south of Egypt, had been under British sway until the uprising which cost the life of General "Chinese" Gordon. All seemed lost in the Sudan until it was discovered that the last of Gordon's lieutenants, a European with a chequered past called Emin Pasha, was holding out as governor of Equatoria, the southernmost province. Emin Pasha captured the imagination of the British at home, and Stanley was sent to his rescue.

That journey was Stanley's most terrible. The way to Emin led through the Great Forest of the Congo, a jungle so thick that the sun scarcely reached through the stifling trees. Many of Stanley's party died, he himself suffered devastating gastric attacks, and his mission was not entirely successful. (Once found, Emin accepted relief with considerable reluctance.) But Stanley had once again opened unknown territory to the eyes of white men.

Back in England, Stanley was honized. He also found time to deepen a long friendship with Miss Dorothy Tennant, a talented and beautiful lady of 36. In July of 1890 Stanley, then 49, married her in Westminster Abbey. So weak was he still with malaria and gastritis, however, that he was forced to sit through part of the ceremony.

After restful wanderings in Europe, Stanley was well enough to undertake a lecture tour in the United States, and then throughout the British Isles, Australia, New Zealand, Tasmania. Always the talk was of Africa; his thoughts returned there constantly, and his wife feared that she would lose him to its dark magic. So she persuaded him instead to stand for Parliament, where he could forward African interests in safety. In his first campaign he lost; but in a second, three years later, he won, and served for five years.

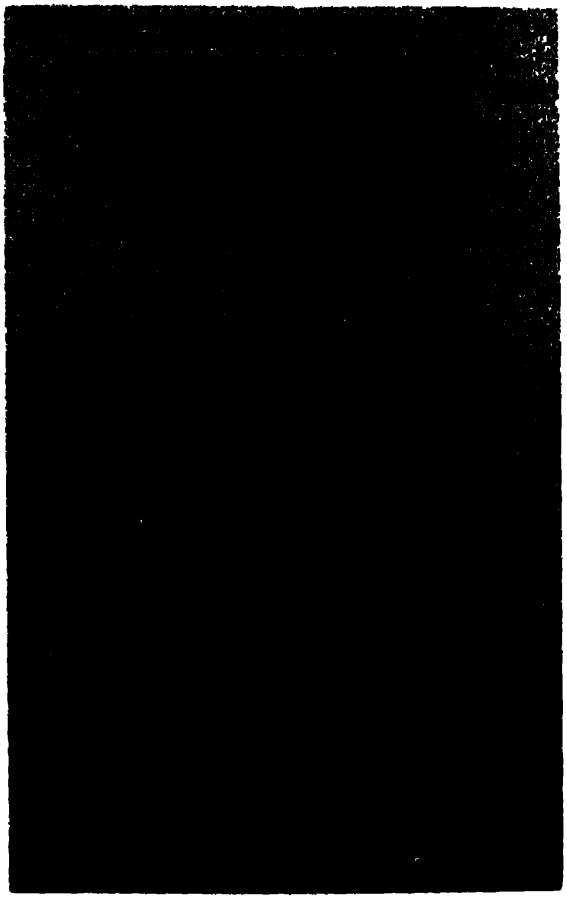
Yet he saw Africa again briefly, visiting the Transvaal, the Orange Free State, Natal and Rhodesia. But he missed his wife and the baby boy they had adopted, and he was determined to settle in a real home. He and Dorothy selected a big Tudor house near Pirbright in Surrey, and there he spent his remaining years. At 58 he had been knighted. All honours now were his; his family life was full.

The great traveller's last trip was in an ambulance to London. As he lay dying there, his mind wandered and he cried, "Oh! I want to be free! I want to go into the woods, to be free!" When Big Ben struck four o'clock in the morning of May 10, 1904, Stanley murmured, "How strange! So that is time!" Two hours later he was gone.

Over his burial place at Pirbright there rests a great stone, bearing only his name and dates, his native name, *Bula Matari,* and at the base the one word that sums up his life: AFRICA.

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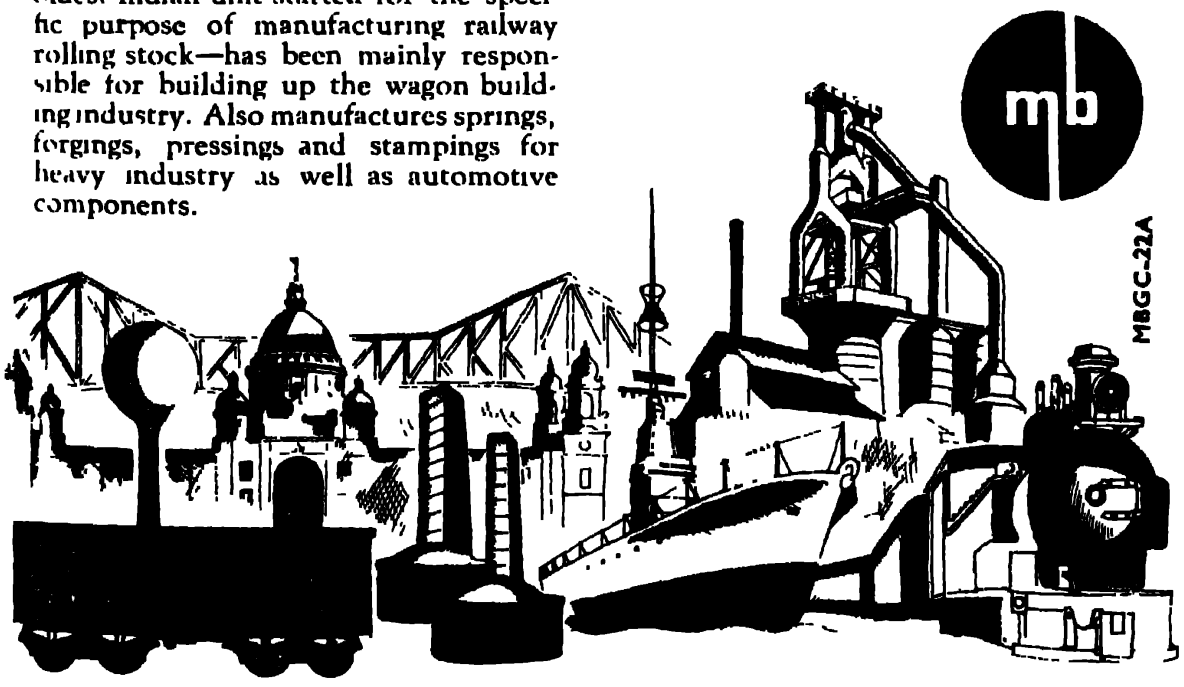
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A leading Latin-American diplomat outlines a plan to remove the cancer of subversion from the Western Hemisphere

CASTRO MUST GO!

By Gonzalo Facio *Ambassador from Costa Rica to the United States, Chairman of the Council of the Organization of American States, 1962-1963*

We who are members of the Organization of American States must face up to a challenging, history-making task. We must move promptly and decisively to eliminate the terrible danger that threatens all of us: the ominous menace of communist subversion being thrust upon us from the unhappy island of Cuba. *The Soviet satellite regime of Fidel Castro in Cuba must be overthrown and replaced with a democratic government truly representative of its people.*

As a spokesman of a small but freedom-loving nation, I realize that our big neighbour, the United States, is in no immediate danger from Cuba. But Latin-American peoples and governments are. For example: every year there is a steady flow of Latin Americans to Cuba for ideological and paramilitary training. The number totalled 1,500 in 1962 alone. These "students" are taught all types of subversive techniques, then return to their homelands to foment disorder and chaos aimed at the overthrow of legitimate democratic governments and the establishment of Castro-like regimes. It is they who have led the bombings, burnings, sabotage and riots against the government and industry of Venezuela in the last two years. They singled out Venezuela for special attention because Venezuela is oil-rich, and oil is a vital need of the Soviet-Castro regime.

Tons of communist literature,

featuring anti-government and "hate America" themes, are shipped into our countries from Cuba. Cuban radio stations beam programmes of hate and revolt into our countries day and night. And then there are arms shipments. Recently, President Romulo Betancourt of Venezuela reported that a cache of three tons of modern automatic weapons had been found early in November on a Venezuela beach. He offered proof, in the form of markings, that these arms came from Cuba. "Joint action will be necessary," he said, "to finish with this bridgehead of communism in Latin America."

There is no doubt of the intention of our enemies: it is to destroy law and order in Latin America and to work towards the day when Russian communism is in complete control.

It is up to all members of the Organization of American States, not just the United States, to erase this danger to our stability and security. We Latin-American countries have both the power and the responsibility to do it. As U.S. Secretary of State Dean Rusk said at the national convention of the American Legion last September: "The political or military intrusion of Moscow into this hemisphere and the continued ambition of Castro to interfere in the affairs of other nations in this hemisphere are neither acceptable nor negotiable."

There are some who fear that any sort of action against Cuba would be a violation of our united policy of non-intervention. It is true that all nations of the OAS are pledged not to intervene in the domestic affairs of their neighbours. But an *enemy* intervention has already taken place. Through Cuba *the Soviet Union has intervened in the very heart of the Americas.* The proposal here is thus not to intervene, but to *put an end to Soviet intervention.*

What method can properly be used to remove the cancer of subversion that the Castro regime represents? Not direct military action. During the 1962 missile crisis such action by the United States would have been justified under the Monroe Doctrine, and would have been applauded by nearly all freedom-loving Latin-American leaders. And it would have been effective. Today, however, not even the United States could be confident of a quick, clean military success.

Nor can we, as some people in apparent desperation have suggested, negotiate with the Soviet Union to bring an end to the bearded satrap. Khrushchev could not possibly entertain such a plan. Soviet leadership will suffer a tremendous loss of prestige when Castro falls; to expect the collaboration of that leadership in the process is unthinkable. What, then? *The only solution is to encourage an internal revolt by the Cuban people.*

The brave and talented people of



Cuba do not willingly endure the subjection into which they have been betrayed. Yet they cannot shake off Castro and the Russians without help from outside. We, their neighbours, can best give that help in four important ways. We must:

1. **Hold to a clear, firm policy.** We must make clear, repeatedly and unmistakably, through our respective governments, that it is our united policy to assist the Cuban people in regaining their independence. There can be no relaxation of diplomatic pressure, no "normalizing" of relations with Castro. A firm policy will give heart to the people of Cuba to endure hardship and to work with patience towards the day when their betrayer will be overthrown. And it will give notice to the Russians and the Castro gang that their days of rule in Cuba are numbered. Nothing so quickly saps the strength of a tyrant as to find that he is outnumbered and will one day be overpowered by those he oppresses.

2. **Maintain economic strangulation.** At a meeting of American foreign ministers at Punta del Este, Uruguay, in January 1962, it was agreed to suspend all trade in military and strategic materials to Cuba. I am proud to say that most Latin-American countries have faithfully observed this policy of isolation. Moreover, shipping of all kinds to and from Cuba by firms in the Americas has fallen off to a mere

dribble. The Government of Panama, which registers ships of many nations, recently cancelled the registration of a vessel that delivered a cargo to Cuba. True, some West European countries and Canada still maintain a small volume of trade with Cuba. But whereas more than 95 per cent of pre-Castro trade was conducted with free countries and less than five per cent with the communists, today these figures are being reversed—80 per cent of Cuba's trade is now with the communist *bloc*.

There can be no doubt that this policy is putting a severe strain on the Castro regime. Cuban export trade, worth 734 million dollars the year before Castro, dropped to 521 million dollars in 1962, and estimates for 1963 indicate a further drop—what trade remains is mostly sugar to Soviet-*bloc* countries. In a speech last September, Castro complained of the "economic noose" about his neck and of his debt of 100 million *pesos* to the Soviet Union. He is increasingly dependent upon Moscow to prop him up, and Moscow is finding this colonial venture a more and more expensive drain.

We must make this economic weapon still more effective by gaining the co-operation of *all* free nations.

3. Aid freedom fighters. By every possible means short of military intervention we must help the Cuban people prepare for their revolt. With





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encouragement, the revolt is sure to come. Despite its boastful claims of popular backing, the Castro government has lost the support of an overwhelming majority of the population. Nearly 300,000 men, women and children have fled the island since Castro betrayed the revolution into communist hands. At least 315,000 more have requested visa waivers to leave. An average of a dozen people a week still slip out in little boats.

Farmers and workers in Cuba express their unhappiness by refusal to produce. Castro and other officials are constantly making frantic appeals for "worker co-operation." Sugar is the basis of the Cuban economy, and Cuba normally produces nearly six million tons a year. Only 3·8 million tons were harvested in 1963, and the estimates for 1964 are even lower.

The militia and the army are too close to their families back home to be indifferent to the popular mood. Aware of the security threat that these soldiers pose, the regime is following a policy of frequent and unexpected rotation of officers and units, as well as rationing of ammunition and close control over all issuance of arms. Still, there are constant defections and conspiracies. In 1963 several hundred naval officers and men were dismissed or arrested. Air force officers from three different bases were arrested, accused of disloyalty.

Many groups throughout the island are secretly preparing for insurrection. I know many of their leaders personally; I have seen their secret reports; I have read their appeals to their Latin-American neighbours to be ready to assist them. At present, they lack the central leadership that will catalyse them into effective action. This cannot be hand-picked by any foreign government; it must be born of the people themselves. All attempts by agencies of the United States to select leaders for the Cuban people have failed. But this leadership will come. When it does, it will need a sanctuary, a secret place where it can be armed and trained, from which to raid and return, and from which its propaganda can be broadcast. We of the OAS must provide that. And we must provide all Cubans with the assurance that when the revolt comes, they will receive all the military and economic assistance they need to succeed.

To hasten this insurrection for liberty, we must give Cuban *exile groups* all reasonable encouragement and help. At the very least, their activities must not be discouraged. The people of the United States should remember that their own Congress declared in September 1962 that the U.S. Government was determined to "work with the OAS and freedom-loving Cubans to support the aspirations of the Cuban people for self-determination." Never let it be said that any of us prevented courageous citizens

of our own hemisphere from trying to regain their homeland from an alien power across the globe.

4. Stamp out subversive activities. Each of us in the OAS also has a job to do at home. When the problem of defending free governments against communist subversion was first presented to the American republics at the Conference of Bogotá in 1948, communist-led rioters attacked the building where the conference was being held and set fire to down-town Bogotá. One of the participants in this mob action was the same Fidel Castro whose government now provides the base for communist subversion throughout the Americas.

We must search out and punish all agents of international communism in each of our countries, whatever their nationalities. We must make effective the resolution of the Inter-American Conference at Caracas in 1954, "to require disclosure of the identity, activities and sources of funds of those who travel in the interests of the international communist movement and act as its agents."

Finally, now that Cuba has clearly been caught slipping arms into Venezuela, I believe we must use whatever military power is needed to prevent such flagrant subversion. Secretary of State Rusk has warned that the United States would use its armed forces to intercept Cuban or Soviet arms shipments to any countries of the Western Hemisphere. He told Congress that "we intend to enforce the right to conduct surveillance" of Cuba and surrounding waters despite the risk of "incidents."

Everything possible must be done in the months ahead to stop Cuba's aggressive ventures. If we fail to stand firm, we will only be faced with bolder, more dangerous communist intrusions.

THE PROGRAMME I have suggested for the restoration of freedom in Cuba depends upon collective action. But it grows out of a tradition. The hearts of all American peoples have always gone out to those willing to fight for their country's freedom. Certainly in their struggle for independence in 1898 the Cuban people had the active support of the United States. And when Castro himself prepared his armed expedition in Mexico to start the revolution that overthrew Fulgencio Batista, many people in the Caribbean and in the United States, deceived by his promises of establishing a democratic regime, aided him in his struggle.

Now our hearts go out to the Cuban people, betrayed into the hands of a foreign oppressor. It is to them, for their sakes and ours, that we must devote our knowledge and our strength. We must help the Cuban people liberate themselves from the iron grip of communism; we must do it now, before that grip closes more tightly on our throats.



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LIFE'S LIKE THAT

My husband bought an old farm bell about a year ago, and mounted it in the front garden of our town house. He had some misgivings about placing the bell so prominently, since he felt it would provide a great temptation to the many children in the neighbourhood. Up to now, only two children have rung it. But I can't count the number of our adult visitors who have vigorously set the bell clanging, after which they say sheepishly, "I'll bet you have a terrible time keeping the kids around here from banging on this thing." —A. H.

The dribs, daubs and spatters at an exhibition of abstract art were beginning to make me feel dizzy. Pausing a moment near a couple who also seemed to have had it, I overheard the man remark, "Well, there's one thing that can be said for modern art—it gives *everybody* a chance."

—Mrs. T. J. McCrory

Once a week, my 90-year-old grandmother visits the village library. Last week I went with her, and was amused to see this prim little person appear at the desk with a racy best-seller.

"Why, I thought you never read anything but history," the young librarian said, plainly shocked.

Gran's cheeks turned pink, but she tucked the book into her knitting bag defiantly. "My dear," she replied, "at my age, this *is* history." —Mrs. G. K. B.

While I was waiting for my husband to pick me up at the entrance of the bank, an elderly dowager swept out and was momentarily taken aback by the rain. She pondered aloud whether she'd ruin her new hat. Then, turning to me, she said with resolution, "I'm going to take a taxi. Let my heirs walk!" —Mrs E. L. Sears

Ten years after leaving school my uncle went back for a visit. Curious to know if his favourite English-literature teacher would remember him, he slipped into her classroom and sat down in a back-row seat.

When the teacher, Mrs. Cutright, entered and glanced round the room, she showed no sign of recognizing my uncle, but began discussing a certain passage in *Ivanhoe* which had been part of the previous night's homework. Several pupils were asked to comment. Then, without warning, Mrs. Cutright called on my uncle.

He stammered, bewildered and embarrassed, and said that he hadn't done the preparation. Mrs. Cutright replied with just a hint of a twinkle in her eye. "Bill Staples, you haven't changed a bit"—and went on with the discussion. —C. C.

I ARRIVED at the airport in the middle of a downpour. With no raincoat or umbrella, I wondered where I was going to park in the crowded car park, and how I was going to get to the terminal in time for my plane without getting soaked. Then I had an idea. I drove up to the terminal entrance and picked out a man who looked as if he were about to dash for the car park.

"Would you like a lift?" I offered. "I'll take you to your car if you'll drive me back here in yours."

With an amazed and grateful expression on his face, the man quickly got in. Three problems were neatly solved: I got his parking space, I didn't get soaked, he didn't get soaked.

—F. A. BODEN

WE HAD just moved to a new town and were feeling miserably homesick. After a hectic day of coping with the problems of a new job, I heard my receptionist announce a visitor and glanced up to see a pleasant-looking woman come into my office. In an instant she wiped out my feelings of uncertainty and depression.

"I read in the paper that you and your family had moved here into your new home," she said. "The address was familiar because my husband and I lived there for many years. I just stopped by to wish you the same health and happiness we enjoyed while it was our home." —LLOYD GARRETT

IN THE hope of preparing our children to meet life's problems, we have quoted one of our favourite axioms to them ever since they were able to talk: "Attitude is more important than fact." Little did we know how well we had succeeded until the day after our 16-year-old daughter had been to a dance.

"That Eddie certainly made a fool of himself!" she exclaimed confidently. "He asked six girls to that party before he got round to me." —A. I.

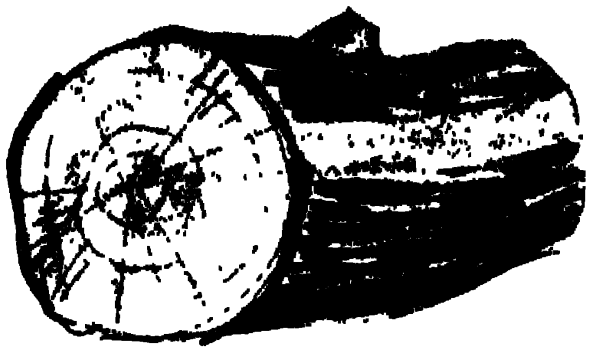
WHILE shopping for groceries I saw three small children dashing helter-skelter, bumping into people, knocking over boxes and creating general havoc. Their frantic young parents finally managed to corner them and as they made their way out of the shop, the father remarked wearily to his wife, "I *told* you this would happen once we let them outnumber us."

—MRS. FREDERICK HOWARD

FROM a window table in a restaurant, we watched a woman park her car and carefully lock it. A few minutes later she returned with some parcels She set them down on the pavement and, after considerable searching, pulled out the keys, unlocked the door, picked up the packages and placed them on the seat. Then she climbed in and drove sedately away. This sounds perfectly normal, but we split our sides laughing. The car was a convertible with the top down!

—ELIZABETH ANDREWS

MY HUSBAND, a lawyer, is frequently consulted by clients who, after learning what the cost of legal services will be, decide to do without his aid. Recently the elderly vicar of a small, struggling church came in with a legal problem. After patiently listening to an explanation of my husband's fees, he left the office with a prudent, "Thank you, sir, but I believe I'll just pray this one through." —JAN LYONS



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The Courage of a Submariner's Wife

The widow of the captain of the nuclear submarine "Thresher" tells her story. It is an inspiration to all who undergo a time of tragedy

By Irene Harvey
As told to Michael Drury

It was Wednesday, April 10, 1963, and I was at home in New London, Connecticut, getting dressed for an evening of bridge.

Our two sons—Wesley, 11, and Bruce, eight — were downstairs watching television. My husband, Lieutenant-Commander John Wesley Harvey, captain of the U.S. nuclear submarine *Thresher,* had sailed the day before. *Thresher,* first of her class, the newest, the best, the fastest, was on her test run after a long overhaul in Maine, and I knew Wes was pleased to be under way at last.

The phone rang, and I took it on the bedroom extension. It was Admiral Elton Grenfell, in Norfolk, Virginia, commander of the Atlantic Fleet submarine force. He said they had lost contact with the submerged *Thresher* and everything humanly possible was being done.

My first reaction was not one of intense alarm, because it is not entirely uncommon to lose contact. In the next sentence, though, he told me how long it had been—eight hours. I replied, "Then we had better start praying." He said yes, and that he would keep me informed. I put the phone back, troubled and somewhat frightened, but not—how shall I say this?—not quite believing it.

Suddenly, Bruce came bounding up the stairs, crying, "Mummy, Mummy, there's a sub lost, but *my* daddy will find it, because my daddy has *Thresher* and it's the *best ship* in the whole world." Before I could speak, he was off again. So the news was on television. I knew it was serious.

The quilt on our bed was handmade by the good Mormon women

Condensed from McCall's

of Idaho, where we had lived in 1954 while Wes trained on the reactor prototype for *Nautilus*. I studied the quilt's wild-rose pattern and struggled inwardly for calmness. That was one of my husband's dominant qualities—calmness; it was one of the things that made him good at his job and a good husband and father. I knew he would expect it in me now.

I telephoned Lieutenant-Commander Shepherd Jenks, commanding officer of the nuclear submarine *Skipjack*, and our longtime close friend. He said he'd be there as fast as he could. When I hung up, both boys were in my room, solemn, begging me with their small-boy eyes to deny it, saying, "Mummy, it's *Thresher*."

I told them I knew and that it was probably going to be all right. Bruce asked if they were just playing hide-and-seek, and I said it might be something like that; but Wesley was silent.

Then Shep came, bless him, with the minister from our church and the doctor from the base. My father phoned from Philadelphia to say he was on his way, and my sisters rang up from Minnesota and Pennsylvania. Wes's parents called, too, and his brother, who said he was en route. We put the children to bed, still reassuring them; but in my heart I prayed for the dignity and courage to get through the next few weeks.

The next morning, Admiral Grenfell and Secretary of the Navy Fred Korth came to my home, confirming what we already knew. One of the hardest things was being pulled two ways: as long as there was a thin thread of hope, it would be wrong to give up; yet it was equally important to face reality.

Bruce went to school that day as usual, but friends took Wesley to their home. Later in the afternoon, while Shep Jenks stood by like a rock in a storm, I took the boys aside and told them *Thresher* was gone, and Daddy would not be coming home. I told them as much as I knew, that the submarine had dived and had not been able to resurface and that if anyone could have brought it back, their father would have done it.

They did not cry, nor did I, then. A few days later, I spent some time alone with each of them, and we wept together. They have been brave and steady. Bruce, who is our artist, later drew me a coloured picture of *Thresher* resting quietly on the bottom of the sea—with her flags flying.

You cannot know how wide and deep the goodness of people goes until you come up against an experience like this. Navy wives did all my ironing, cleaning, sewing. Food came by the ton. I did not cook a meal for three weeks. Whenever I had to leave the house, there was someone to chauffeur me. Our car dealer left a brand-new car in the garage, fearing I might be too

upset to drive my husband's car. Max Shapiro, a civilian lawyer friend, took my boys fishing. Another lawyer, retired Naval Captain Louis Patrick Gray, volunteered to handle the legal affairs of all *Thresher* families, entirely free.

You might think such things don't matter in the face of such loss, but they do. They are a real and tangible comfort, present and felt. You can do anything when you know you're not alone, and so many, many people let me know they cared, friends and strangers alike.

Letters and telegrams came by the hundreds from all over the world, sustaining and strengthening with their outpouring of love and sympathy. An elderly Greek couple, former neighbours of ours, wired simply: "We pray with you."

A Roman Catholic nun told of an all-night vigil in her convent on behalf of *Thresher's* crew, adding, "Don't even try to answer this." A Korean student wrote from Seoul: "I would like to burden half of your grief with myself. Dear lady, God will never discard you & your family & your husband, too." I know, Chung See Kwan, but I needed you to say it.

I had letters from doctors and clergymen we had known at our various stations; from high-school classmates and teachers. Naval officers with whom Wes had served—and their wives—wired and wrote and came. The highest-ranking government officials and Naval officers paid tribute to Wes's abilities and character.

You see, my husband died doing something he believed in, and so did the 128 others on that ship. Not everyone is so privileged to follow his hopes and ambitions. Men sometimes become disenchanted with their work or have to settle for just making a living—but in the wholly volunteer submarine service a man's work is so important that his wife has to make room in her heart for her husband's other love. It isn't always easy. You have to find and build the courage to accept it honestly, and then it becomes a source of pride and gratitude for you as well as for him. By holding your husband's work in some measure of reverence, you can share it with him, and having shared it is a big help—a very great help when the going is rough.

You learn very early that your husband won't always be home when you want him, or even when you need him. Wes was never home when the boys had tonsillitis or took honours at the Cub Scout banquets or appeared in school plays. Part of my job was to keep him real and important to them. I would say, "Daddy will be so proud. We'll tell him all about it."

And yet, you aren't secondary. I wish I could tell that to some of the young Navy wives. They are so young, and they want so much; but

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you come to see that the wall-to-wall carpeting and dishwashers and other things you think are important aren't important at all, because they are *things*. The love and faith you have in your husband are important. His pride and belief in his work are important.

After the Cuban crisis in 1962, Wes wrote to me: "Everything has its price, and good things cost more than bad things. I feel I am at least a small part of the reason why this world was saved from the total destruction of nuclear war. Except for our Polaris submarines on station things would have been much different . . . Perhaps now there is still hope that Wesley can go on to be a doctor or a farmer or a saxophone player, and Bruce can have time to find himself."

One thing I have learnt is that strength and faith are not things you acquire in a moment when you need them—they come from a lifetime of searching, from all you have experienced. When I was a student nurse, I had my first encounter with death. A little boy was fatally injured in an accident. I stood with the family at his bedside and saw the heartbroken father gather the dying child into his arms and sob. I burst into tears.

The head nurse took me into the linen room and smacked both sides of my face, hard. I was so startled that I stopped crying and gaped at her. She said, "What kind of a nurse do you think you'll make if you blubber? Now you go back in there and *help that father*." That is how I learned that grief can sometimes be selfish.

I have always been grateful to that head nurse, and never more so than when I was asked to face the loss of my husband. When I thought of all the love and support that surrounded me, my heart went out to the other *Thresher* families. I would have loved to gather them all to me. Instead, I drafted a letter and sent it to each of them. Their replies are still coming in, and they are so wonderful. And among the flowers that came when Wes died was a bunch of sweetheart roses from my nurses' training classmates.

Another thing that has sustained me is the goodness and richness of our life together, Wes's and mine. We would have had our 13th anniversary last June. Because of his sea duty, we spent only six and a half of those years together. Yet we shared so much more than mere time; it ought not to be measured that way.

Because of Wes and the work he chose, I saw much of the America he so profoundly believed in. I saw my husband and other *Nautilus* officers and men receive a ticker-tape parade in New York after their history-making trip under the North Pole.

I went to the annual Submarine Ball at the Royal Hawaiian Hotel in Honolulu in a white brocade dress with gold butterflies woven into it —Wes had brought me the fabric



pamper me in a TWA sort of way!

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from Japan. When *Thresher* went down, the Submarine Ball was cancelled throughout the world. Most of the money people had sent for tickets went into an education fund for *Thresher* children.

In 1962, we attended Easter sunrise services in the Punch Bowl in Hawaii. That's an amphitheatre in an extinct volcano in the National Memorial Cemetery of the Pacific, with grave markers all round. It wasn't grim or sad; it was natural and lovely. Navy people live every day of their lives with the concepts of honour and duty and sacrifice.

That summer the nuclear submarine *Sea Dragon,* with Wes as executive officer, left Honolulu for her now famous rendezvous at the North Pole with another submarine, *Skate*. The wives did not know where she was going, of course; but we went to see her off and, in the Hawaiian tradition, put leis of ginger blossoms, orchids, and plumeria around our husbands' necks. As they pulled away from the dock, they took the leis off and threw them in the water. Only Wes's lei came all the way back. I don't think it had any special significance—it is just something I like to remember.

Wes was aboard *Sea Dragon* when word came that he would take command of *Thresher*. He received notice by radio while he was actually under the polar ice, and the letter he wrote me, datelined and postmarked "North Pole," was full of the restrained delight so typical of him. "I'm anxious to hear your reaction to my latest change of orders," he wrote. "I hope and pray and believe you'll be as thrilled as I am." He said all our years of hard work had been worth it, and made a joke about the Navy finally showing some sense.

When Wes had completed his training in nuclear power, Vice-Admiral Rickover, father of the nuclear submarines, sent him a small bronze plaque with this inscription: "O God, thy sea is so great and my boat is so small." The plaque was on *Thresher* when she went down, and one of the first things Admiral Rickover did was to have a duplicate made for me.

On April 15, five days after *Thresher* was lost, my husband's fellow submariners paused wherever they were to say good-bye to their comrades. In *Skipjack* 30 miles out in the Atlantic, our friend Shep Jenks read from the 139th Psalm: "If I take the wings of the morning, and dwell in the uttermost parts of the sea; Even there shall thy hand lead me, and thy right hand shall hold me." It was dusk, and he laid a floral wreath on the water, from Wesley, Bruce and me, to all the brave men of *Thresher*. Then *Skipjack* submerged and went on her way.

Those men were not afraid to go on. I keep remembering that. I was married to one like them. I was—and am—a Navy wife.



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TOUCHING? IT'S SENSATIONAL!

Touch is the only one of the five senses in which man enjoys unchallenged superiority over animals. Yet it is one which few of us use, with awareness, to enhance our lives

By John Kord Lagemann

"Don't look at the world with your hands in your pockets," Mark Twain once told an aspiring young author. "To write about it you have to reach out and touch it."

I thought of this advice the other day when I called on Robert Barnett, executive director of the American Foundation for the Blind. Barnett was blinded at the

Condensed from Christian Herald

age of 14 by a shotgun blast. As we chatted, he noticed, I don't know how, that I was gazing at a life-size bronze head of Helen Keller, which he keeps near his desk.

"Feel it with your hands," he told me. I ran my fingers over the cool metal. "Now does it look any different?" Barnett asked.

The difference was startling The sculpture now had weight, depth, contour and character which had escaped my eyes.

"Touch is more than a substitute for vision," Barnett said. "It reveals qualities other senses can't even suggest. One of the greatest mistakes people make is thinking you have to be blind to enjoy it."

Learning to develop the sense of touch is something like converting the other senses to stereo. In seeing with the eyes alone we are limited to what is immediately in front of us. Touch superimposed on vision enables us to see "in the round."

Awareness of touch can bring a new vibrancy to the most commonplace experiences. "I have just touched my dog," wrote the young Helen Keller in her diary. "He was rolling on the grass with pleasure in every muscle and limb. I wanted to catch a picture of him in my fingers, and I touched him lightly as I would cobwebs. But lo, his body revolved, stiffened and solidified into an upright position, and his tongue gave my hand a lick. He pressed close to me as if he were fain to crowd himself into my hand. He loved it with his tail, with his paw, with his tongue. If he could speak I believe he would say with me that paradise is attained by touch."

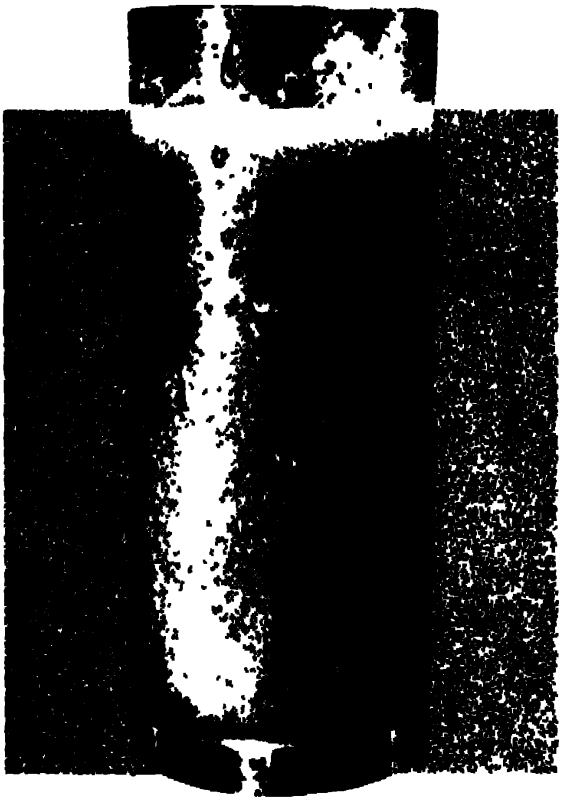
The sense of touch is capable of extraordinary development. Expert millers can recognize any grade of flour by rubbing a little between thumb and forefinger. A textile expert can identify the dye used in a cloth by the difference it makes in the texture. John Grimshaw Wilkinson, a blind botanist, learned to distinguish more than 5,000 species of plants by touching them lightly with his tongue.

These feats are impressive, but nearly all of us are better at touching than we realize. When we reach into pocket or purse, it is not too difficult to pick the coin or key we want. A mother can tell by touching her wrist to a child's forehead if his temperature is higher than normal.

The human hand is an amazingly sensitive instrument. Psychologist Dr. Frank Geldard of Princeton University found that many of the people he tested could identify different materials—paper, wood, metal, plastic—by a tap of the finger. They were also astonishingly sensitive to smoothness and roughness. Simply by running a fingertip over a slightly etched piece of glass, most of them could detect eminences no higher than 1/25,000th of an inch.

Through touch we can judge with surprising accuracy any movement over the skin's surface. In

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research it was found that when a piece of string was pulled across the skin, most subjects could detect a movement as slow as one millimetre per second—as slow as the minute hand of a large clock.

A game for improving the sense of touch is to try to identify individuals by their handshakes. While blindfolded, take another person's hand in yours, feel its size, its boniness, the pressure of the grip, the quality of the skin. You'll find that these clues produce an impression that is almost as individual as a signature.

Touch comes to us through hundreds of thousands of receptors distributed throughout the skin. The rich and varied sensations they transmit include hardness and softness, heat and cold, smoothness and roughness, pressure, tickle, itch and thrill. The immediate cause of the sensation is displacement in skin surface by anything brought in contact with it—a heavy weight, a drop of water, a puff of air. In some regions of the skin, as on the back of your hand, the bending of a single hair will be felt.

Even sound waves produce a wide range of skin sensations. While listening intently, have you ever said, "I'm all ears"? It is literally true. We do feel sound waves through the skin. Albert Schweitzer tells us how, as a boy, he used to lie in the organ loft of the church where his teacher practised and feel the great Bach chorales as a laying on of hands.

Hi-fi addicts habitually turn up the volume because they enjoy the added intensity of sound waves striking the skin.

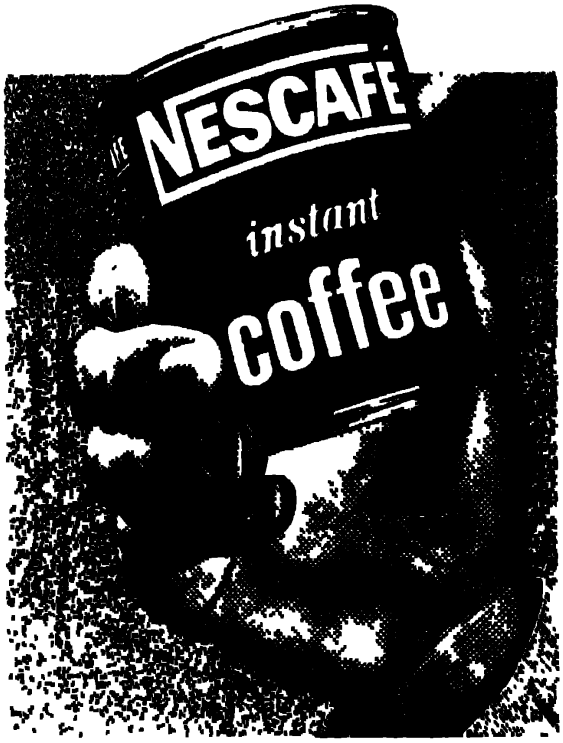
"Don't touch!" we were admonished as children. But something keeps urging us to establish direct contact with things. Department stores have never been able to cure women shoppers of fingering clothes, curtains, furniture, even food.

There is something very calming and reassuring about simply handling things. On a plane trip recently I sat beside a Greek lawyer. As we talked he idly thumbed a string of large amber beads. "I'm trying to stop smoking," he explained. "When I rub these I can do without cigarettes." In Greece and the countries of the Middle East such "worry beads" are in the pockets of many men. A Chinese is apt to carry a tranquillizing piece of jade.

Touch sensations come in many ways. A woman feeling a soft fabric or a fur coat brushes it against her cheek to get the fullest pleasure. The Eskimoes who rub noses instead of kissing may not be as eccentric as they seem to us; the nose is more sensitive to pressure than many other parts of the body. Next in pressure sensitivity are the fingertips, the backs of fingers and the upper arm.

The soles of the feet are also extremely sensitive. Yet how little conscious of them we are. At classes

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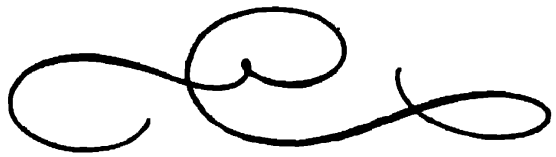
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given for the blind, housewives are advised to do the cleaning barefoot. They can't see the dust, but they can feel it with their bare soles. Going barefoot around the house has more to recommend it than that, however. What a pleasure to let your feet sink into the pile of a luxurious rug or touch a sun-warmed tile floor!

Experiences that heighten our tactile responsiveness give us a renewed sense of self-identity and well-being. You can easily confirm this through a simple exercise. Close your eyes and try to become aware of everything that is touching your body—even the air on your bare skin. This is not quite as easy as it sounds. We are so used to taking the body for granted that we tend to lose contact with it. But five or ten minutes of reflection will probably give you an awareness of the entire body surface—and with it greater physical relaxation and inward calm.

We are aware today of how important touch is to complete understanding of anything, and there are now museums that, instead of the old "Don't Touch" signs, offer children the chance to touch—to feel the roundness of a sculpture, the beautiful balance of a Greek urn, the satiny patina of a Queen Anne chair, the rough iron of an antique kettle.

Perhaps, as we all strive to enlarge the range of our impressions, our motto should be: Do touch!



À la Carte

My Canadian uncle, on a visit to Boston, was waiting for breakfast at a restaurant counter when one of the waitresses rushed up and called to the cook, "Burn the British." Aware of Boston's role in the American Revolution, my uncle wondered if feelings against the Crown still ran high so many years later. But his misgivings were promptly allayed as he watched the cook calmly put some English muffins in the toaster.

—Contributed by Mrs. Alan Marston

Every Friday our local restaurant has a special dinner attraction: all the fish you can eat for two dollars. There is always a long queue, as harassed waitresses run back and forth carrying large trays of second and third helpings. We were enjoying our fish dinner at the counter one Friday when the phone rang near by. One of the staff picked up the receiver and said, "Aquarium."

—Contributed by Phyllis Baker



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If you lack a mechanical mind, here are some unorthodox remedies to try when domestic appliances go . . .

By Lilyn Carlton

THE AVERAGE housewife is altogether too quick to run to the telephone to call in a mechanic for every little quirk that develops in a household appliance. He should be called in only as a last resort, after everything else has been tried. *What* else? Well, I have a few suggestions.

No. 1: *Do nothing.* Once, as a result of a slight earth tremor, our electric kitchen clock started to behave in a peculiar manner. It made an ominous whirring noise and ran unusually slow. The second hand moved in its appointed course, but took about three minutes to make its 60-second circuit. I had vague thoughts of going to the basement and looking at the electric meter, but, other matters pressing at the moment, I did nothing. Well! An hour later that clock adjusted itself. The whirring noise stopped, the second hand was dashing round at its accustomed breakneck speed, and there it was—all fixed!

No. 2: *Leave the house.* This is one of the best devices, since whatever has gone wrong may right itself while you are gone, and at the same time you can run an errand. It works especially well with funny sounds.

"What's that noise?" I say.

"What noise?" says my husband, whose ears are not as keen as mine.

"Listen!" I say, holding up a finger. We listen.

"I can't hear anything," says my

Condensed from The Atlantic Monthly

husband. "It's all in your mind." (He is a psychiatrist, and that is his answer to everything.)

"No," I say. "It's a kind of *eek-ump, eek-ump, eek-ump.*"

He meets this with either another "It's all in your mind" or, more likely, complete silence.

This is the time when I go out. And when I come back, the noise is nearly always gone.

This also works very well with funny smells.

No. 3: *Turn the disturbing appliance upside-down and shake it.* I have, for example, an electric coffee grinder, and it gives me very nice service. But every now and then, instead of emptying the ground coffee in a ladylike manner into a little cup provided for that purpose, it makes a terrible grinding noise and scatters the partially ground coffee in big, hard chunks in a kind of explosion all over the kitchen. Then it gives a loud belch and just sits there. I didn't know how to handle this at first, but after some experimentation I found that picking it up, turning it upside-down and shaking it hard does the trick.

Only two months ago I spent a fortune having my typewriter completely overhauled—cleaned, oiled, polished, reintegrated, disinfected and whatever else they can do to a typewriter to bring the cost up to that kind of money. After a short time I began to have trouble with the space bar and the shift key. I rang the typewriter man.

"Look here," I said. "Only a few weeks ago (I exaggerated a little) I paid you ——" and I told him my troubles.

"Better bring the machine in," he said, "and we'll see if we can find the trouble."

"It may be just some little thing," I said to him. "Perhaps I can fix it myself." He laughed. *Laughed!*

"Oh, no, madam. You couldn't fix it yourself. Better bring it in."

I just said thank you and hung up and went back to the typewriter. Then I picked up the machine, turned it over, and gave it a few hearty shakes. Since then it's been working fine.

No. 3 also works very well with table-model radios.

No. 4: *Slap or kick the appliance.* I remember the time our dishwasher wouldn't function. I had just loaded it with the accumulated dishes of three or four meals, set the top down and turned the arrow to On. There was a queer little whirring noise, then a *fffffff!*, and then it just stopped.

I called my husband. "Dear," I said, "the dishwasher won't work."

"It's all in your mind," said Dear. But he got a screwdriver, took the cover off the dishwasher and looked at the machinery.

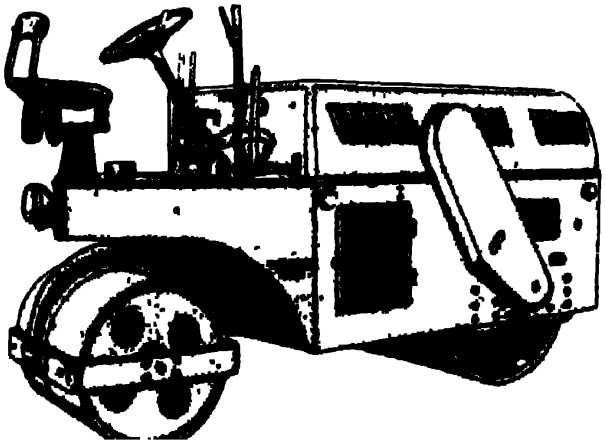
"Why won't it work?" asked my husband, in a tone which clearly implied I was responsible for the breakdown.

"I haven't the slightest idea."

"I'll go and get my tool kit," he

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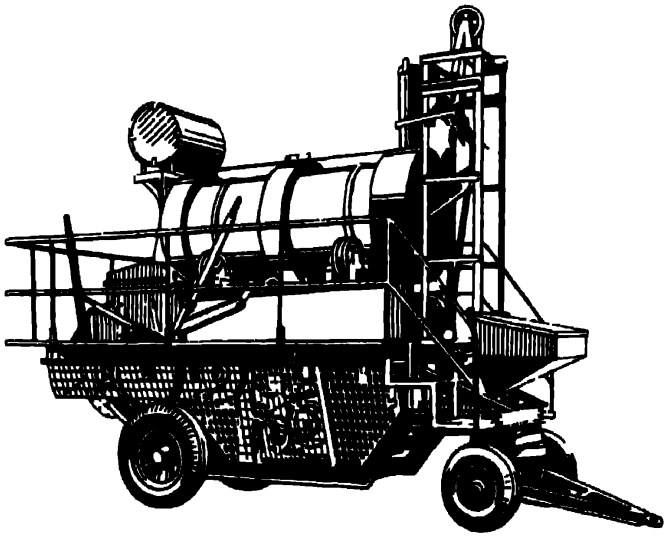


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said, and disappeared down the basement steps.

I decided to do a little experimenting. First I gave the machine a few smacks, and it replied with a promising little *beep*. Next I tried a small kick. The machine responded with several encouraging noises, and, thus egged on, I backed up and let fly with a really good one. That did it. By the time my husband had found his tools, the dishwasher was purring away smoothly.

"Look," I said. "It's working fine now."

"I told you it was all in your mind," he said.

No. 5: *Get others to witness the malfunctioning appliance.* This is one of the very best methods. As soon as you call someone in to show him, the sink tap stops making that funny noise and the toaster pops up with just-right toast.

"It looks fine to me," says whoever you have called in. "What's the matter with it?"

"Wait a minute," you say. "Just stay here. It was [whatever it was doing] just a minute ago."

So you both stand and wait. And it functions perfectly. But as soon as the other person is out of the room it starts playing up again.

Now, after you have gone through all the above suggestions and none has worked, you'll just have to phone for a mechanic. But this, too, is a sort of device, and so perhaps I ought to label it.

No. 6: *Go ahead and call in the mechanic.* Then take your stand at the front window and watch for him. He parks his van in front of the house, and you watch as he gets out, goes round to the back, opens the rear doors of the van and begins to unload his equipment. He has a *lot* of equipment, hasn't he? Eventually, after a good deal of difficulty, he gets it all unloaded on the front path and proceeds to drag it up the steps.

Then you wait until he has all this paraphernalia on the porch and is breathing rather heavily as he leans against your doorbell.

Now is the moment. *Instead of answering the door, go back to the problem appliance.* Nine times out of ten it will start working beautifully then and there.

Rules of the Game

SHORTLY after we moved into a new district our six-year-old was invited to join a "Biscuit Club." The only requirement was to supply biscuits at the first meeting. When I asked our daughter's new friend how often the club met, she replied, "Oh, we just meet when we have a new member."

—Mrs. W. M. A.

My Most Unforgettable Character



By Guillermo Gonzalez Luque

Marching into the ring with trumpets blaring and the crowds cheering, he looked like nothing special—just taller and perhaps a bit uglier than the other toreros in the parade. But when he went out on the sand to face his bull, it always happened: some magic transformed Manolo, my boyhood friend and distant cousin, into the incomparable Manolete.

For eight years he was the world's most popular matador, commanding as much as 500,000 pesetas (Rs. 95,000) for one afternoon in the arena. In Spain, where he was a national hero, statues were dedicated to him, poets and composers sang his praises. In Venezuela and Peru, fans slept outside the bullrings and fought for tickets to his *corridas*. In Mexico people paid as much as 2,500 pesos (Rs. 2,400) each to glimpse his artistry.

As Carlos Arruza, the great Mexican matador, once said, "They would have filled the stands just to see him walk across the ring in the parade."

Manuel Laureano Rodríguez Sánchez and I grew up together in the old Moorish city of Córdoba. Like most boys there, 35 years ago, Manolo and I played *corrida* in the cobblestone streets. We took turns scampering back and forth with a set of horns while the other, swinging a rag of red cloth, tried to imitate the daring passes of the great masters.

Later, when Manolo went off to face real bulls, he took me along as his *mozo de estoques*—his sword-handler, chauffeur and valet. From the ringside I watched a gawky and uncertain youngster acquire the poise and presence of a true champion.

From 1939 until his tragic death in 1947 at the age of 30, I saw him perform in more than 500 *corridas*. He was often carried off in triumph by the crowds.

But the greatest triumph of Manolete was that he always remained Manolo inside. Though he cut a proud figure in the bullring—elegant in his spangled "suit of lights," haughty and almost arrogant in his approach to danger—Manolo was actually a mild and delightfully modest person. Like all toreros, he loved to be cheered in the arena. But unlike most others, he hated being fawned over and pointed out in public. Once, during a variety concert, a poet dedicated his reading to "Manolete, the most glorious of all matadors." When he had finished and the lights came on, Manolo's place was empty.

A gaunt and solemn-faced man with a big nose and incredibly sad eyes, Manolete was rather stiff and unsmiling in public. Because of this everyone said he was a melancholy person, probably brooding about fate and the perils of the bullring. It was touching but untrue. He was simply shy.

Away from the public gaze he was a warm and easy companion. And though he took his work very seriously—for there's little humour in the horns of a bull—he often poked fun at himself and the flattery heaped upon him.

He liked to tell the story about a man who lived near the hotel we always stayed at in Madrid. Each time Manolo passed by, this fellow would shout down from his window, "*Olé* the good torero! *Olé* the best man in the world! *Olé* the he-man!"

This worried Manolo, so one day he stopped and yelled back, "*Hombre,* why do you call me such things?"

"That's how I feel. You *are* the best."

"But why does that matter to you?"

"Because"—at this point Manolo would slap his knee and chuckle—"by buying many tickets to your

fights, and then reselling them, I am making myself rich!"

Pretence had no place in his life. Where another matador might affect an air of bravado, Manolo made no bones about his fear of the bulls. "Every time I see those horns," he once told me, "I want to run for my life." In a radio interview he was asked how he felt about a forthcoming *corrida* in Zaragoza. "Frankly," he said, "I hope all six bulls escape over the French frontier."

Bullfighting was in Manolo's blood. His father, his grandfather and his famous uncle Pepete had all been toreros. But when his father took him to a *corrida* for the first time, he did not like it. This pleased his mother, already widowed by one matador. After her second husband also died, almost penniless, she hid all mementoes of the bullring from her son.

But in vain. Santa Marina, where we grew up, is the "bullfighters' quarter" of Córdoba. By the time he was 11, Manolo already stood out in our street *corridas*. He was pale, thin and rather awkward, but eager to learn.

On a ranch near Córdoba, at a *tentadero* to try wild heifers for their spirit, he met his first real test, a heifer that meant business. Instead of attempting flashy twirls, he stood still, calmly leading the heifer back and forth with the red *muleta*, making it search for him in the cloth. Even after he brought the animal too close and was grazed by a horn, he didn't want to stop. "It's only a scratch," he said on the way home. "We must not tell my mother." He was then 13.

At 15 Manolo was performing at village fairs. At 16 he left school to join a *charlotada*, a troupe of comic toreros who clowned with calves. His part was serious—to fight a hefty young bull—but the crowds laughed anyway. "His face is as dreary as a third-class funeral," one critic jeered, "and his body is like an undriven nail."

A year later he caught the eye of the retired matador Camará, who became his manager. Camará knew so much about bulls that people said of him, "His mother was a cow." He poured his knowledge and experience into the young *novillero*, and in 1939, as I watched from the ringside, Manolo became a fully-fledged matador. After successes in Seville and Barcelona, he took blasé Madrid by storm. "Never has there been such a torero," wrote one critic, "never such elegance and grace in the history of bullfighting."

Because of his vast following, Manolo commanded far higher fees than any matador before him. In eight years he earned 100 million pesetas (nearly Rs. 2 crores). As president of the bullfighters' union he used his influence to raise the scale for other toreros, too. He paid us helpers well, made us feel important. He lived in a splendid mansion with his mother and two

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sisters, owned several cars and two big farms.

Glamorous as it may have seemed, the life was a grind. For eight months or more a year we were always on the move, often appearing in 25 rings in 30 days, driving all night to the next town, another *corrida,* more bulls. To Manolo, all *corridas* were as important as one in Madrid. "The only honest way to work," he said, "is in close to the horns." He was badly gored on a dozen occasions. Once, when he could have jumped clear, he stood his ground and took a horn in the leg. His explanation: "People do not pay to see Manolete run."

For Manolete, each *corrida* was a contest not with a thousand-pound beast but with himself. Each charge of the bull was a test of his own courage. He met it standing straight and unbelievably still, leading the horns close by his body with slow sweeps of the red *muleta* or the larger cape of mauve and gold. Again and again he would bring the animal slashing past him, probing the cloth for something to toss. Such was his cold mastery that the *aficionados* began to call him *El Monstruo*—"The Monster," or "Prodigious One."

Even with the horns grazing his legs he often stared away absently, as if in the midst of danger he had found serenity. And when it was time to kill with the sword, he always went in straight over the

lowered horns, offering more of himself to the bull than any other matador dared. Even people who knew little of bullfighting, or actually disapproved of it, could see that, with Manolete at least, the real issue was not the death of the bull but the courage of the man.

By the end of 1946 the years in the arena had begun to take their toll. Though not yet 30, he looked closer to 50. Badly scarred and exhausted, he announced that he would retire after the 1947 season.

Suddenly the bullfight critics turned on him. "Is The Monster now afraid of the horns?" they taunted. As he went from arena to arena in 1947, always giving his best, fans kept demanding more and more of him, as if they could not let him escape. It recalled the old Spanish saying: "The only beast in the *plaza de toros* is the crowd."

Eventually, an able, cocky and ambitious young matador called Dominguín began to boast that the real reason Manolete was retiring was that he didn't dare to compete with him. Manolo took up the challenge. He agreed to appear with Dominguín in three *corridas* during August.

In their first two meetings the crowds cheered Dominguín—their new darling—and gave their old hero a tough time. I remember a particularly good fight of his in San Sebastián, when the spectators were still very hostile. Near the end Manolo came over to the ring fence

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to get a new *muleta* from me. The Mexican matador Arruza, who was standing near by, asked angrily, "What more can they want?"

"I know what they want," Manolo answered. "And one of these days I might give it to them."

The final *corrida* was in Linares, a mining town in Andalusia. Two years before, as I was driving to this place, the car had struck and slightly injured a small girl. Extremely upset, Manolo took the child to the hospital and called in the best doctors. As we were leaving he said to the Mother Superior, "This is a lovely place. I'd like to come back some time, under different circumstances."

This time Manolo drove the car to Linares. On the day of the fight, August 28, he was in good spirits. With him at the hotel was his old friend Baldomero Sánchez de Puerta, on whose ranch Manolo liked to hunt and ride during the off season. They talked through the long afternoon—but never about bulls—and joked together. While I was dressing Manolo for the ring Baldomero suddenly pointed to the matador's bare leg and yelled, "There's a centipede on you!"

Manolo jumped. But when he saw it was only the stitch marks of a recent wound, he roared with laughter. "You see what a timid fellow I am?"

Just before we left for the arena, Manolo prayed before a small statue of the Virgin. Then, as he always did, he removed a ring from his finger and gave it to me to keep for him. A gift from his friend Gilbert Roland, the film star, it was inscribed, "My son, do not be afraid."

In the plaza were 10,000 spectators, including *aficionados* from all over Spain. They gave Manolete a few cheers with his first bull. But Dominguín received an ovation for his flashy and spectacular cape work; the crowd was with him.

Then, facing his second bull, Manolo put on one of the most thrilling performances of his life. He made 15 passes in a row without moving an inch. Then he turned his back for another series, bringing the horns to his spine. His passes were clean, stripped of all flash and fakery. He worked so much closer to the horns than Dominguín, and with such serenity and dignity, that the entire crowd stood up and roared—as so often before—for Manolete.

When he had demonstrated his complete mastery of the bull, Manolo came to the fence to get the sword from me. His manager had noticed that this bull hooked to the right. "Watch that," he warned. "Take him from the side."

Manolo shook his head. "No. There's only one way."

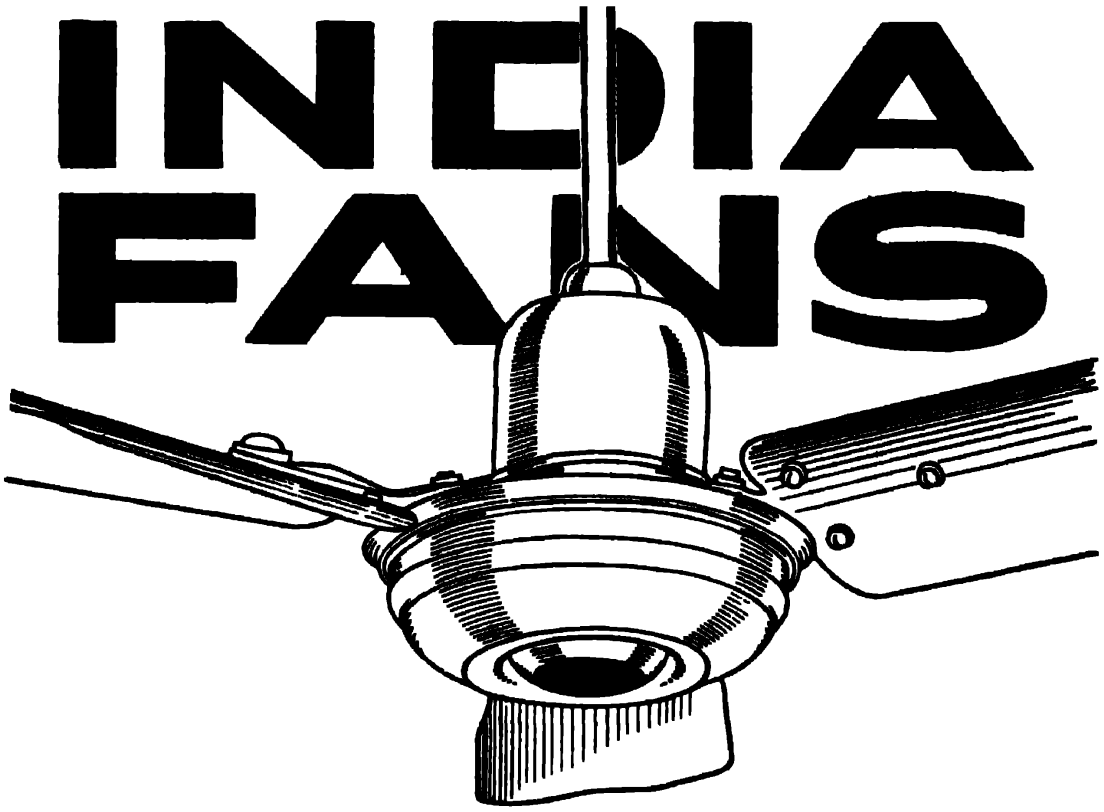
As he always did at the "moment of truth," he went in over the right horn, the red *muleta* crossed over in his left hand to keep the bull's head low. Just as the sword went in between the shoulder blades, the

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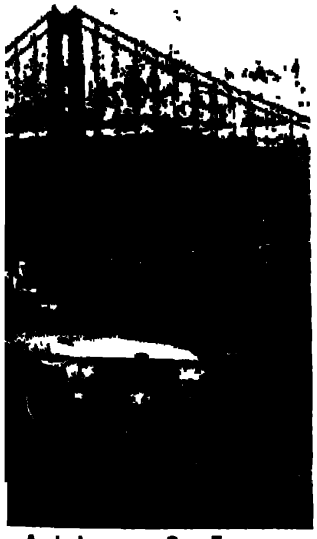
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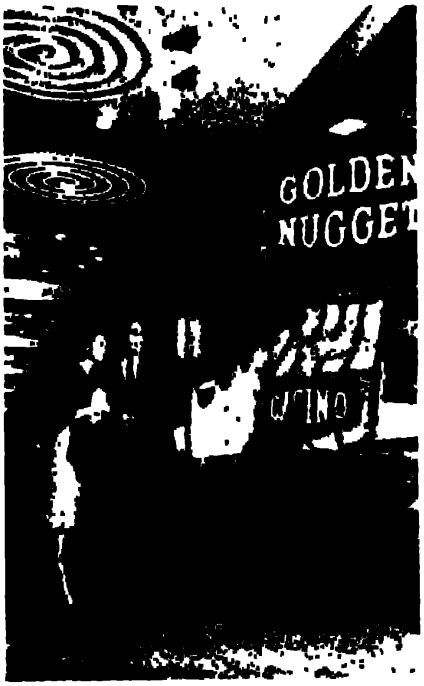
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animal suddenly hooked to the right. He caught Manolo in the groin and tossed him high. The crowd screamed, and all the other toreros rushed into the ring to distract the bull with flapping capes. I ran out with them and grabbed the bull's tail to pull him away. But when I saw Manolo's awful wound I fainted.

Seconds later, even as Manolo was being lifted from the sand, the bull fell dead. After an emergency operation in the arena infirmary Manolo was moved to hospital—the same one he had admired so much two years before. The doctors put me in another room, and gave me injections to quieten me. Early next morning they told me Manolo had just died.

His death plunged Spain into deep mourning. If the mourners felt guilt as well as grief, it was because the crowds in the arenas, those same people who once worshipped Manolete, had pushed him on to the horns of his last bull.

Among the thousands who wrote letters of sympathy to Manolo's mother was General Franco, who posthumously awarded Manolo the Cross of Beneficence for his innumerable, often anonymous, services to charity. For his funeral, 100,000 people lined the streets of Córdoba. As the cortège passed through the streets, flowers were dropped from black-draped windows and balconies.

At the very next *corrida* there, fans arrived with a large banner which said, "Manolete is not dead. He lives in the hearts of the people of Córdoba."

I didn't see it. I haven't been in a bullring since that afternoon in Linares nearly 17 years ago.

Bridge of Sighs

A FAVOURITE bridge story concerns the bride who came crying home to mother on her wedding night. "All he did was talk about the duplicate tournament you and he played in last night," she wailed. "He started by explaining how he played the first hand, and when he got to hand No. 25 I ran out and came home to you."

"That's too bad," answered the mother. "The 25th hand was the most interesting of the night." —R. C.

"AT THE conclusion of one of my lectures on point-count bidding," says bridge expert Charles Goren, "an old lady approached me and announced, 'My partner and I have decided to adopt your system, Mr. Goren. Why, it's even better than cheating!'" —*McCall's*



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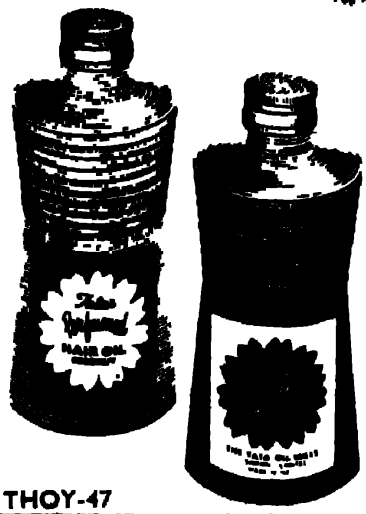


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THOY-47

An essay for every day

There Is Magic in Commonplace

THERE IS a growing tendency to discard the great commonplaces which govern our days, a growing lack of appreciation of the experiences in the routine of daily life.

Thomas Jefferson recorded his belief in the satisfying power of common daylight, common pleasures and all the common relations of daily living. Benjamin Franklin wrote it down that a man's happiness is less the result of great gifts of fortune which come rarely, than the thousand little joys of every day. Everyday feelings which decide the colour of our lives—family ties, friends, books, flowers, food, water, the wind, health, shelter, sleep, the open road, rain in summer, fire in winter, dawn, songs, the starry sky, love in youth and memory in old age: Are not these vast commonplaces the very gist of life?

The world is commonplace only when one regards it in a commonplace way; the smallest object contains something unexpected if you give it conscious attention and observation. To interpret and glorify

Condensed from Scribner's Magazine

the commonplace thus should be one of our main occupations.

Most of us know someone who can make even the first words of a conversation interesting, be it only about the rain or the fine weather. Another has some ordinary occasion to write you a note which you cherish for years; a third has a way of giving you a trinket which makes you prize it tenfold and put it on the list of keepsakes; and another, pointing to a lichen on a damp wall, tells you the most interesting thing you have heard for weeks.

It is a trite remark—because it happens to be so important—that deep thought is only prolonged thought, for which the everyday occupations of our common lot serve as the homely, essential food. We must refuse to sequester ourselves; nothing so contributes to maintaining our common sense as living in the universal way with the human beings about us.

The man who has some knowledge of common things is better equipped to face the world than one with a smattering of uncommon subjects. I lately discovered to my horror that in a large mixed gathering, or even with shop assistants, I was far less elastic in conversation, far less keen in repartee—far less quick to catch the ball and toss it back—than were many people unread, untravelled, who had, nevertheless, lived in an expressive environment.

It is a great lesson to learn that a fairly thrilling life may be had by simply enriching the everyday moments of existence.

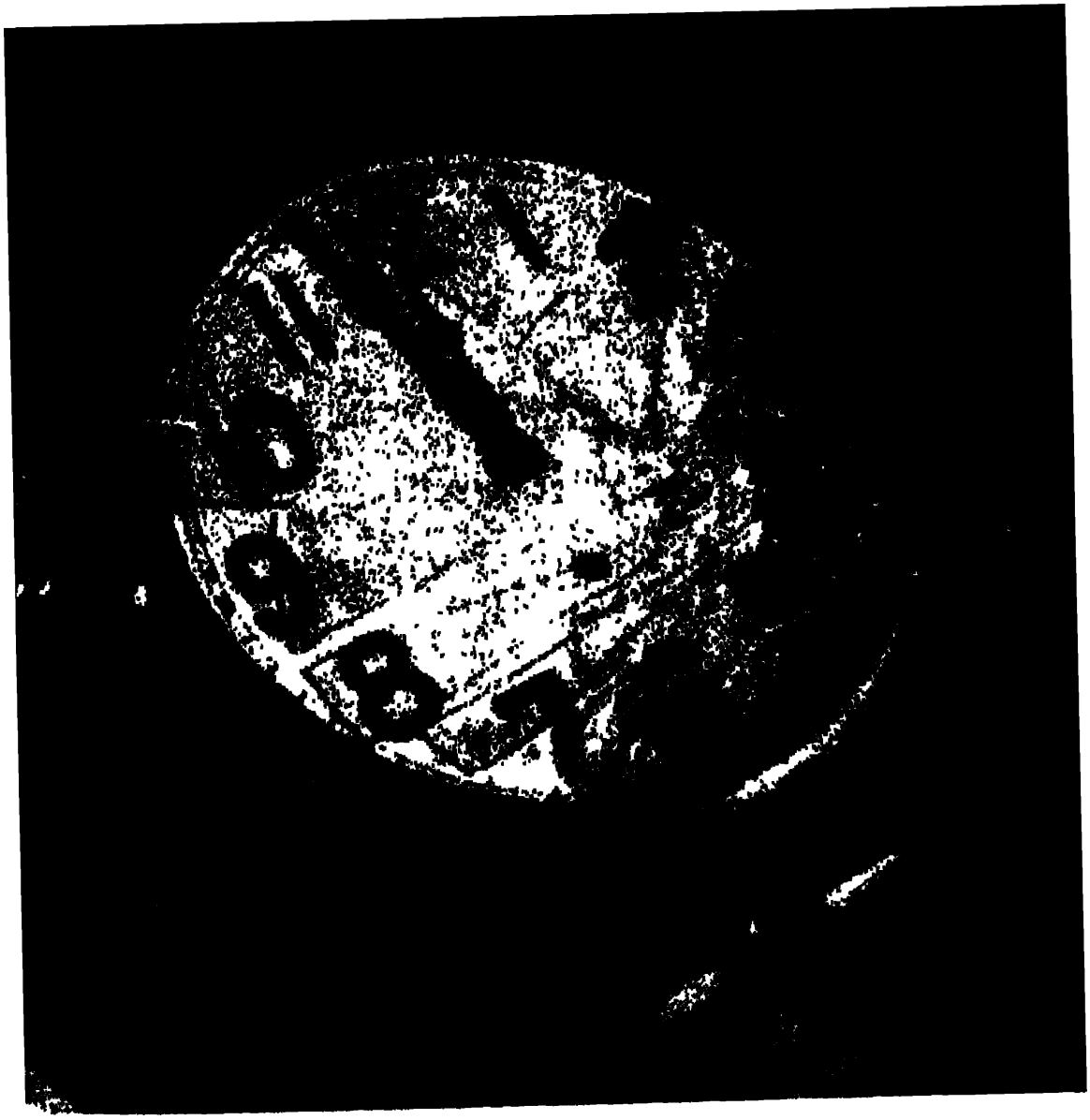
Irish Sweep

ROBERT BRISCOE, former Lord Mayor of Dublin, tells this story:

Closely identified with De Valera's government, I was most unpopular with certain elements. One day I went down to Wicklow to look at a horse I thought of buying, though I was warned that there might be an attempt on my life. The horse's owner and I agreed on a price, provided the horse went well. A friend mounted and leaped him over a high hedge into the next field. Following, I landed in the midst of five or six men with guns. To my amazement they did not fire. This seemed a good omen, and I bought the horse.

Years later I recognized one of these men on a Dublin street. "Was that gathering in the field in Wicklow for the purpose of shooting me?" I asked. "It was, sir," he answered. "But we heard you make the bargain with that fellow in the next field, and it seemed a pity to spoil a deal so good for him and bad for you." —With Alden Hatch, ***For the Life of Me***

BOOK OF THE MONTH



TWO MINUTES TO NOON

From the book by NOEL BUSCH

The earthquake which struck Japan in 1923 was the most destructive natural disaster in the recorded history of man. Unleashing avalanches, waves and furious tornadoes of fire, it cost more human lives than the A-bomb devastation of Hiroshima. In Two Minutes to Noon, Noel Busch tells the full, terrible story of this awesome catastrophe.

As was his invariable habit, Admiral Gonnohyoe Yamamoto got up at 4 30 that Saturday morning of September 1, 1923 He faced a taxing day, for Hirohito, the Prince Regent of Japan, had asked him to form a new government The Prime Minister had just died and, as protocol required, his Cabinet had resigned, leaving the country poised between governments

Although preoccupied with this problem the slender 71 year old admiral followed the same Spartan ritual he had observed since naval academy days After brisk

physical exercises, he bathed, dressed, and cleaned his room with meticulous care (a task he refused to share with either his wife or the servants). He breakfasted promptly at six, then packed into a suitcase the formal clothes—top hat, striped trousers and frock coat—he would need when he reported to the Prince Regent.

When his chauffeur deposited him at Tokyo's Naval Club, reporters were already on hand. Yamamoto brushed through them hurriedly and at once set about forming a new Cabinet.

He worked steadily all morning. The admiral was seated at a table with the President of the Supreme Court, Kiichiro Hiranuma, a particularly reluctant candidate, when suddenly there was a distant roar, the floor trembled, and the chandelier began to swing crazily.

Now the whole building shuddered. Plaster fell from the ceiling and walls. A chimney crumbled and crashed to the floor, filling the room with mortar dust and soot. Then the shock passed.

Like all other residents of Japan, which records some 15,000 tremors of varying intensity each year, Yamamoto was wise in the ways of earthquakes. He brushed the plaster from his clothes and calmly led the way to the club's garden. With imperturbable courtesy he even controlled his impatience with the reporters.

"Well," he told them gravely, "you will have plenty to write about today."

As if to underline his words, another terrific shock shook the ground. Water splashed out of the garden pool, and from the clubhouse came a great din of smashing lamps, china and window glass.

The safety of the Prince Regent was Yamamoto's main concern, and he decided to check on this immediately. Earthquake or no, it would be inconceivable to appear before Hirohito without proper clothing, so the admiral slipped back into the building and worked his way through the debris-filled corridor until he found his bag. He changed hastily, re-emerged in formal attire, and went straight to his car, which fortunately was undamaged. "Drive to the palace," he instructed the waiting chauffeur.

The quake had been the worst Tokyo could remember, but so far there had been comparatively little destruction or loss of life. Many buildings exhibited huge fissures and X-shaped cracks, but no major building had been destroyed except the Twelve-Storey Tower—Tokyo's tallest structure and a major tourist attraction—which had snapped in two. Elsewhere in the city some 5,000 houses had collapsed, and perhaps 1,000 people were dead.

But these casualties were almost lost among Tokyo's three million inhabitants. Most people had wisely dashed out into the streets the

instant the tremors began, and most of the injuries and fatalities had come from the fall of broken roof tiles. But even here the prudent had saved themselves by carrying chairs over their heads as protection.

As Admiral Yamamoto and his chauffeur sped towards the palace they found the streets surprisingly passable. Apart from the fissured masonry, the rubble of broken roof tiles and the milling crowds, there was little evidence that anything really serious had happened. But the admiral, an experienced administrator, suspected (rightly, as it turned out) that gas mains and water pipes were broken throughout the sprawling, teeming metropolis, and that telegraph, telephone and electric lines were down.

Moreover, this shock had occurred at a particularly bad time. As they drove through the Ginza—the city's commercial district—and on through the narrow, twisting alleys that cobwebbed so much of Tokyo, Yamamoto noticed a clock in a shop window. It had been stopped by the earthquake and, like menacing shears, the hands stood poised at exactly two minutes to noon. This



meant that lunch fires had been going in countless thousands of charcoal stoves. The admiral shuddered at the sight of half a dozen columns of smoke rising above the rooftops.

His fears were well founded. For the Great Kanto Earthquake, as it was called, was soon to develop into the worst natural disaster in the history of the human race.

A Madness of Earth and Sea

THE QUAKE was not confined to Tokyo. The gigantic concussion had rocked the entire Kanto Plain —100 miles of Japan's most densely populated land, including Tokyo, Yokohama and dozens of towns and villages along the eastern coast.



The exact centre of the disturbance was later fixed at 57 miles south of Tokyo, under the waters of Sagami Bay. As the shock waves hit the shore, it seemed that an explosion had been set off underfoot. Potatoes shot out of the ground as if fired from guns. Farmers walking across fields sank knee-deep in the shaken earth. Chimneys appeared to sprout from the land, as well-linings popped up to heights of ten feet. The island of Jogashima suddenly became part of the mainland when the intervening sea floor shuddered upward.

The effect of the quake on resort towns and fishing villages was catastrophic. Ninety per cent of the buildings in the villages of Soga and Shimosoga collapsed immediately. Half the 5,000 buildings at Odawara tumbled into ruins, and within an hour the rest were on fire. By night the whole town was gone.

At Nebukawa the quake hit just as a train loaded with week-end travellers pulled into the station, which was notched precariously in the side of a steep slope, 150 feet above the bay. The shock dislodged a hillside above the station, and with a deafening roar thousands of tons of earth, rocks and trees descended — plunging the train, the station and everyone in them into the sea.





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Later in the day Nebukawa itself suffered a similar fate. Behind the village, millions of yards of mountainside hurtled 650 feet into the narrow gorge of the Nebukawa River. An enormous glacier of mud formed and, as it advanced to the mouth of the river, swept most of the village into the bay.

At Kamakura—famous for its gigantic bronze statue of Buddha—the shock alone destroyed 85 per cent of the town –2,500 homes. Then, before the residents could catch their breath, a new threat appeared.

Young Ian Mutsu, the son of a retired Japanese diplomat and grandson of a famous foreign minister, saw it first when he raced to the beach to search for his mother. To his bewilderment Ian noticed that the waters of the bay were receding with great speed. Rocks appeared which had never before been visible. With chill foreboding Ian remembered stories of the *tsunami*—tidal waves which often follow quakes, and which may reach speeds of 650 miles per hour.

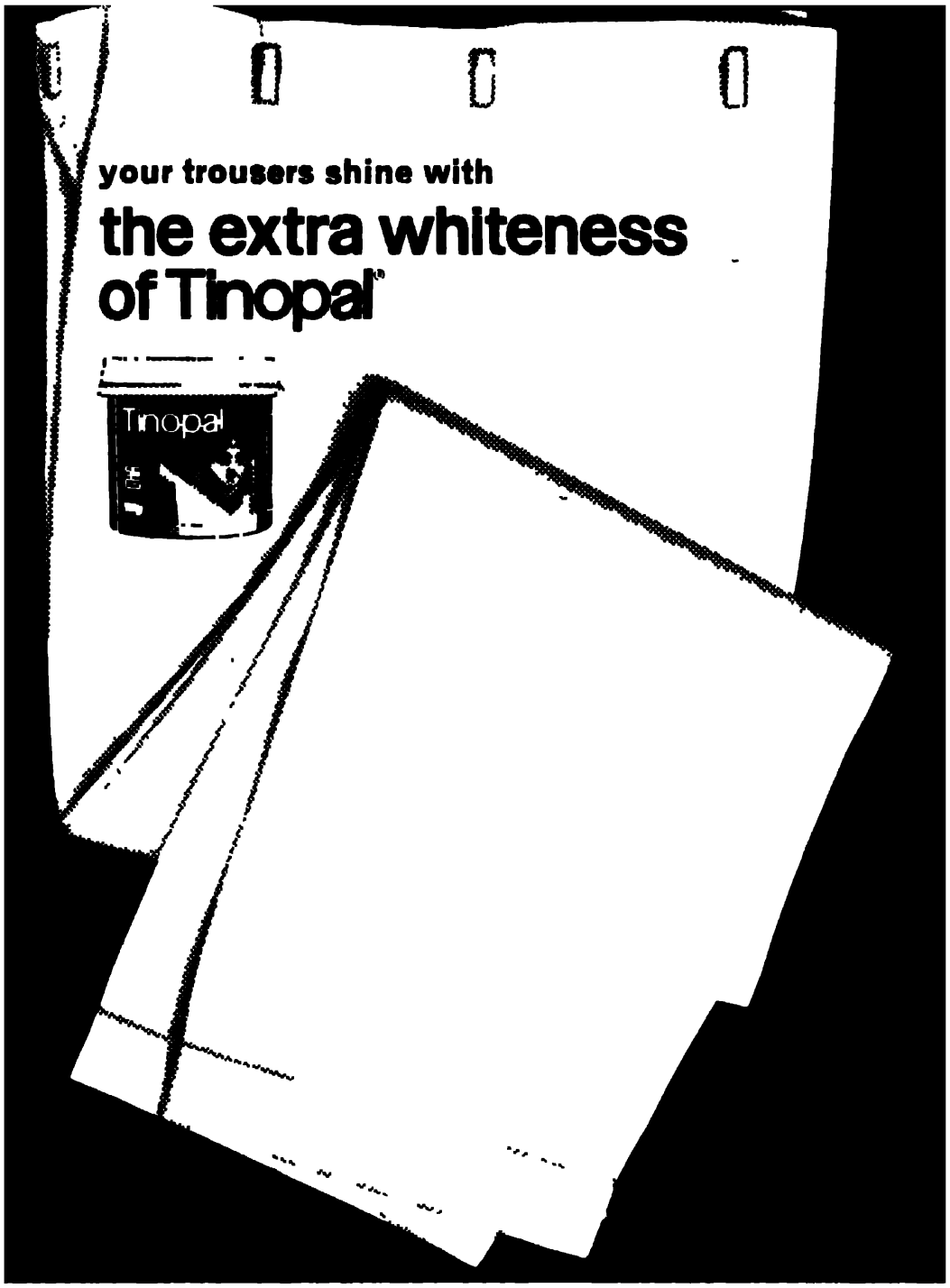
Then, staring in amazement, the young man saw what appeared to be a solid wall of water swiftly approaching. He began to run, first up the slope of the beach, then to a steeper hillside above. Crossing a roadway, he gesticulated wildly at the driver of a car that for some reason had come to a stop.

Ian continued to run until he was 50 feet above the shoreline. Then he looked back. The tidal wave had reached the beach. Towering three times a man's height, it struck the shore in a great swell, never cresting. It swept up the slope to the road, tumbling the car Ian had passed. In the streets of Kamakura's lower districts, the water rushed among the houses at nearly roof



height, carrying away walls, even whole buildings. Two hundred people, caught in their homes, were drowned.

Even larger tidal waves struck elsewhere. At Atami, a 36-foot wave killed 160 people; at Ito, 100-ton fishing boats were carried a quarter of a mile inland. And some 300 houses up and down the coast were



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actually sucked into the sea by the incredible undertow.

The cataclysmic deluge left a terrible wake of destruction and death, but in some areas it actually saved lives by extinguishing thousands of fires. Ironically, far greater horrors were to come in the north, where there were no tidal waves and where the quake was less severe.

The Death of Yokohama

SECONDS after the earthquake ravaged the Sagami Bay coast, the shocks reached Yokohama, a city of half a million, Japan's main seaport. Instantly, the entire city buckled, and nearly every major building fell—a thunderous collapse of hotels, consulates, banks, theatres, and public halls.

A number of ships were moored inside the breakwater of the huge harbour when the earthquake struck. Among them was the liner *Philoctetes,* whose passengers had a panoramic view of the disaster. One of them later recorded his impressions in the Kobe *Chronicle:*

> The decks of the ship were vibrating in a most alarming manner, and it was feared the shock might break her back. This was on a 14,000-ton liner, on the water—supposed to be the safest place during an earthquake.
>
> About a minute following this lengthy shock, a yellow cloud rose from the land, growing in size and deepening in colour, travelling at great speed to the north. This cloud was doubtless caused by the dust from collapsing buildings, and it soon filled the atmosphere.

The massive destruction was followed almost at once by fires impossible to contain. All water mains were broken, every fire engine buried in its fire station, and, since the city was spread out along the length of the harbour, the freshening south wind found easy access to the flames. Huge coal supplies caught fire; they were still burning two months later. Scores of petroleum tanks burst, flooding the streets and harbour with oil, which ignited and turned Yokohama into a vision of hell.

The conflagration gutted the city's commercial district and its finest residential area, a prominence called the Bluff, where a large number of British and American citizens lived. This foreign community was hard hit; 250 perished. One was the U.S. consul, Max David Kirjassof, whose charred body was later found with those of his pregnant wife and small daughter in the garden of the consular residence.

Another was Miss Jennie Cuyper, principal of the Ferris Girls' Seminary, who was in the school at the time of the quake. The building collapsed, pinning Miss Cuyper in the wreckage. Several members of the staff who had escaped began to dig her out, but before they could reach her the building caught fire. Miss Cuyper called out to them:



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"I am being summoned by my Heavenly Father Go now The fire is close" The rescuers paid no heed But eventually their own clothes began to catch fire, and they were forced to retreat to a near-by garden There they heard Miss Cuyper cry out, "Good bye, all!" and start to sing a hymn

A number of Europeans who were staying in Yokohama's Grand Hotel were more fortunate The building fell, but the collapse was leisurely, permitting nearly everyone to escape The most spectacular case was that of Mrs Chichester Smith, wife of a British air ace She was nearly six feet tall, noted for her regal presence At the moment of the earthquake she was having a bath in her second floor hotel suite The tub, supported by the plumbing pipes, made a gentle descent into the street and came to rest there, with Mrs Chichester Smith and most of the bath water still in it A gallant witness of this remarkable scene had the aplomb to remove his shirt and trousers and hand them to Mrs Chichester Smith, who put them on and proceeded to the waterfront

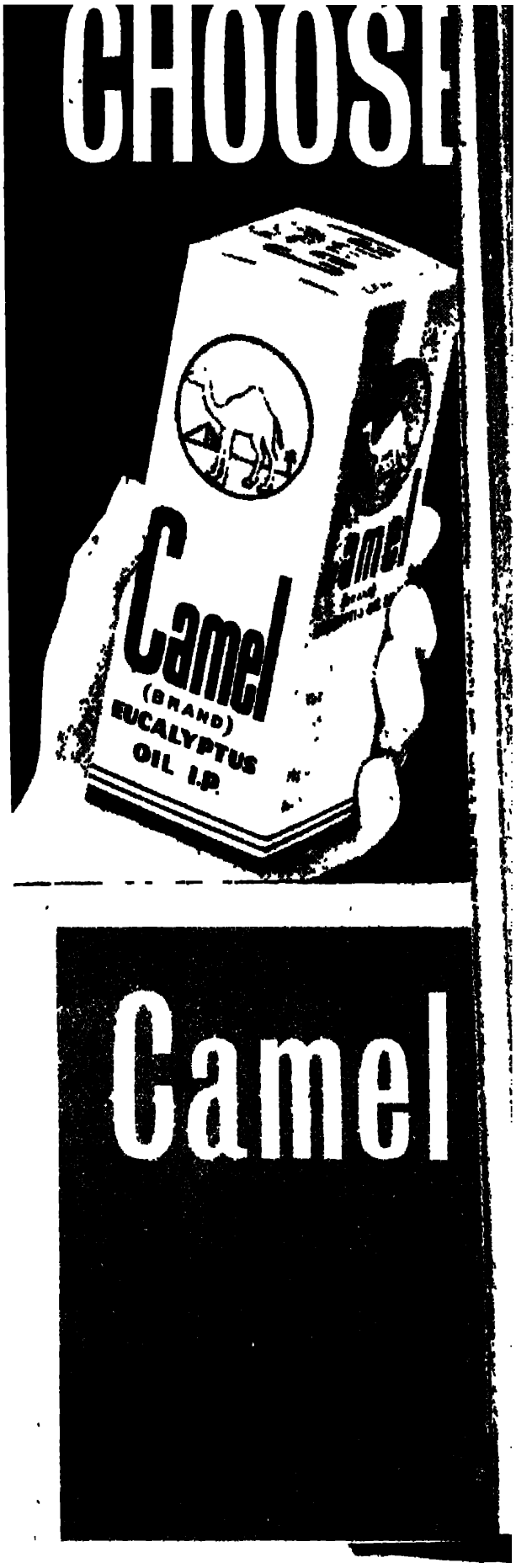
Survivors of the earthquake tried to take refuge from the fires in one of three ways Many raced to Yokohama's network of canals, unaware that the earthquake had caused the level of Tokyo Bay to fall, drawing water out of the canals so that they held less than half their ordinary depth of four feet Thus thousands

were trapped. Helplessly exposed, they waited in horror, hemmed in by flames along the canals and surrounded by burning sampans that drifted downstream.

The second refuge was Yokohama Park, some 20 acres of open land a mile in from the shore. Crowds swarmed to it, relieved to find that the broken water mains had turned the park into a swamp. Plastering themselves with mud, those in the centre of the throng survived. But the heat which pressed in on all sides was so intense that thousands of people on the perimeter were slowly roasted.

The waterfront offered the best chance of safety, and tens of thousands fled there. Neck-deep in the water, they dodged patches of burning oil and waited for rescue. Among them was Yokohama's chief of police, Jiro Morioka, who spent three anxious hours in the water before he was picked up by a ship. After a cup of broth and a bowl of rice, he asked permission to send out an appeal for help; in the confusion and panic, no one else aboard the ships had thought of this. He wrote:

> Today at noon a great earthquake occurred and was immediately followed by a conflagration which has changed the whole city into a sea of fire. All traffic facilities have been destroyed and communications cut off. We have neither water nor food. For God's sake send relief at once.





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Jiro Morioka addressed the message to Tokyo. The only reply was silence.

Tokyo—Beginning of Chaos

ADMIRAL Yamamoto was relieved to find that the Prince Regent had survived without injury. Then, with a deep sense of frustration, Yamamoto reported that he had been unable to complete the formation of his new Cabinet.

Hirohito was prepared for this contingency. He informed Yamamoto that Viscount Kosai Uchida, the senior member of the previous Cabinet, would assume the duties of acting Premier until Yamamoto could take charge. At best it would be a stopgap government.

Acutely aware of this weakness, Yamamoto determined to complete his Cabinet as swiftly as possible. But every form of communication had been disrupted, and ugly rumours were beginning to sweep through the city. At a number of crossroads, Yamamoto was startled to see groups of men holding swords, sticks and bamboo spears, checking passers-by and cars—evidently a vigilante corps to put down looting and rioting.

At one point his own car was rudely halted. A man demanded to know the admiral's identity. When he heard Yamamoto's name, he stepped back.

"Certainly you may pass," he said, and was most apologetic that he had not recognized the admiral.

Yamamoto did not like the belligerence of these self-appointed peacekeepers, but there was nothing he could do. Nor were Uchida and the other hastily recalled former Cabinet Ministers any more effective. During the next chaotic hours they tried to cope with the rising emergency, requisitioning food supplies and setting up a distribution office. But the situation was soon beyond them, mainly because of the fires.

"Flowers of Edo"

GREAT FIRES were a part of Tokyo's history. In feudal days, when the city was known as Edo, the saying had arisen that no lifespan was complete unless it included three huge conflagrations. And in an expression of bitter but indomitable pride, the Japanese referred to the fires as *Edo no hana*—the flowers of Edo.

The half-dozen columns of smoke which Admiral Yamamoto had noticed soon became scores, and by the end of the first hour fire-brigade observers, watching from their central tower, had reported 134 separate small blazes. Since telephones were useless, the fire commissioner sent runners to the local fire chiefs at 30 stations, ordering them to act on their own initiative.

But there was little they could do: broken mains had destroyed the water pressure. Many of the twisting alleyways, now crammed with debris and terrified throngs as well as with matchbox houses, were too

narrow to admit fire engines. From house after house the roof tiles were gone, and when a breeze sprang up the exposed wooden beams invited sparks and embers.

Inexorably, the fires spread. Many people made no effort to extinguish



the burning coals from their overturned stoves, but simply left them smouldering. With the fatalism bred of recurring fires, they reasoned that their homes would burn anyway, then they would return and rebuild--a feeling expressed in a common Japanese proverb: "Fall down seven times, get up eight."

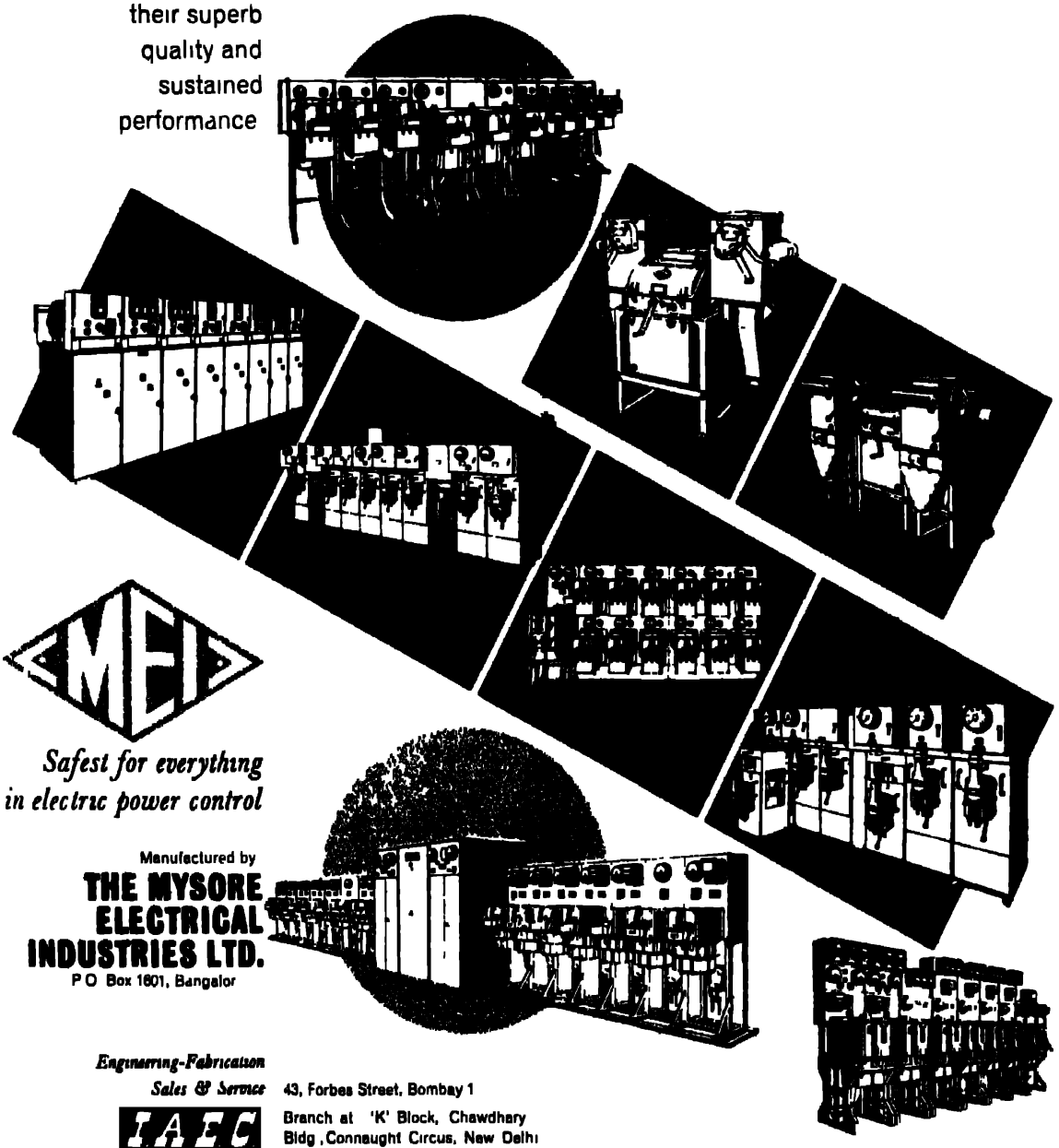
As the afternoon progressed, the many fires merged into two main conflagrations, one on each side of the Sumida River, which flows through the centre of Tokyo, cutting the city in two. By 4.30 the situation was out of hand, and huge swarms of frightened people, most of them pulling handcarts piled high with inflammable goods, began hurrying towards the river from both sides.

Reaching the five main bridges which crossed the Sumida, the crowds saw the fires on the opposite banks and realized that there was no sense in continuing. But it was too late to go back. So they remained, huddling towards the centre of the bridges. Thousands upon thousands joined them as the fires closed in. By late afternoon the crush was so great that many early arrivals were forced to leap into the river--or were simply pushed. The non-swimmers drowned; the swimmers, if they reached the riverbanks, were roasted in the unimaginable heat.

Those who remained on the bridges were given no such choice; they simply burned to death as sparks and flakes of fire rained down on them, igniting their belongings. Of the five bridges, four were charred ruins by the next morning, heaped with bodies. The fifth bridge survived, thanks to a courageous policeman who allowed

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no one to bring any belongings on to it—thus saving 12,000 people.

The rush to the bridges was only one of many mass migrations in Tokyo. In many places conflicting streams of refugees collided with one another, clogging the streets with huge traffic jams. Firemen and police directed the crowds to open areas of seeming safety. West of the Sumida, the most likely sites were Ueno Park, which contained Tokyo's zoo, and the great open plaza before the Imperial Palace.

On the crowded east side of the river, there was only one possible refuge—the Army Clothing Depot. The army had recently abandoned its operations and torn down the depot buildings, leaving an open plot of some 15 acres fronting the river. People thronged there by the tens of thousands.

Dragon-Twist from Hell

THE HEROIC work of the fire service in ploughing fire gaps helped to save a few isolated areas of the city. But the conflagrations continued to grow. To hundreds who watched from the distant upland sections (which were never seriously threatened), the holocaust presented a scene of dreadful but undeniable beauty.

At its height the vast, fiery sea covered 6,000 acres. The flames towered into the sky, shooting up



more than 300 feet, while large patches of burning material were swept as high as five miles by an immense updraught.

This unprecedented updraught triggered atmospheric reactions that were to have peculiarly disastrous consequences. As the intense heat met the cooler air above, a huge, marvellously fluffy white cloud formed over the city, contrasting vividly with the black smoke. Below, in the parks and other open spaces such as the Army Clothing Depot, the growing crowds hoped the cloud might herald rain. But it held no moisture. Instead it contained a dreadful interior turbulence which was to give the Tokyo fire a special climax horrible beyond belief.

By late afternoon, a vast encampment of 40,000 refugees had filled the open acres of the Army Clothing Depot. Many brought all the valuables and furniture they could on bicycles, rickshaws and shoulder poles. Others pulled carts piled high with bedding, clothes, pots and pans, china and even birdcages. Most of the women and older children had babies tied to their backs. Scores of patients from near-by hospitals were carried in on stretchers or supported by nurses.

There was no panic or alarm among the crowds. Although the ground still quivered with tremors

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—237 were felt that afternoon and night, 92 the following day—everyone knew that these were merely aftershocks, never as bad as the first one and rarely destructive. Calmly, the people found suitable places to camp and prepared for a night in the open. As they opened food boxes or laid out straw mats and cushions, strangers conversed, exchanging experiences of the disaster.

The mood was much the same in the spacious Yasuda gardens, close by the Depot. The wealthy Yasuda family, controllers of one of Japan's largest cartels, had opened its grounds to a number of refugees. Among them was Dr. Eikichi Ikeguchi, his wife and three children. Shortly after four o'clock, Mrs. Ikeguchi handed round some rice balls which had been hastily prepared before their departure. The children looked on the occasion as a kind of picnic, and when some of the other refugees indicated they were hungry, too, the good doctor invited them to share the improvised meal.

Suddenly they heard an extraordinary, roaring sound. The air grew pitch-black. Dr. Ikeguchi's five-year-old son, about to pop a rice ball into his mouth, stopped and stood with his mouth wide open, staring in bewilderment at the sky.

What he saw was a gigantic *tatsumaki* or "dragon-twist." There were perhaps 50 such dragon-twists in Tokyo that afternoon—some of them whirlwinds (which originate on the ground), others tornadoes (which originate in the sky and sweep downward). Many of these twisters left no survivors to describe them. But Dr. Ikeguchi's memory of this particular one is vividly clear.

Unleashed by the turbulence in the seemingly harmless white cloud, the tornado first appeared as an immense black pillar of smoke. It was skyscraper tall, as wide as a football stadium, and was whirling counter-clockwise at a speed of 150 m.p.h. Moving slowly down the west side of the Sumida River, it created enough suction to lift several river boats and barges some ten feet off the water.

Midway on its journey it swept over the Tokyo Polytechnical College. The school was blazing, and the furious wind sucked the flames up into itself. Then, veering abruptly, it leaped across the river and engulfed the Yasuda gardens.

Dr. Ikeguchi tried to shout to his wife, but in the deafening roar his voice was inaudible even to himself. As huge flames began to lash the trees, he hoisted his elder son to his back and lifted his daughter in his arms. His wife, their baby boy strapped to her back, joined him. Struggling against the wind, they began to search frantically for a place of safety.

At the front of the Yasudas' house, a driveway ran under a long, old-fashioned *porte cochère*. Partly pushed by the wind, the Ikeguchis and some other refugees crowded into it. It was a tragic move. By

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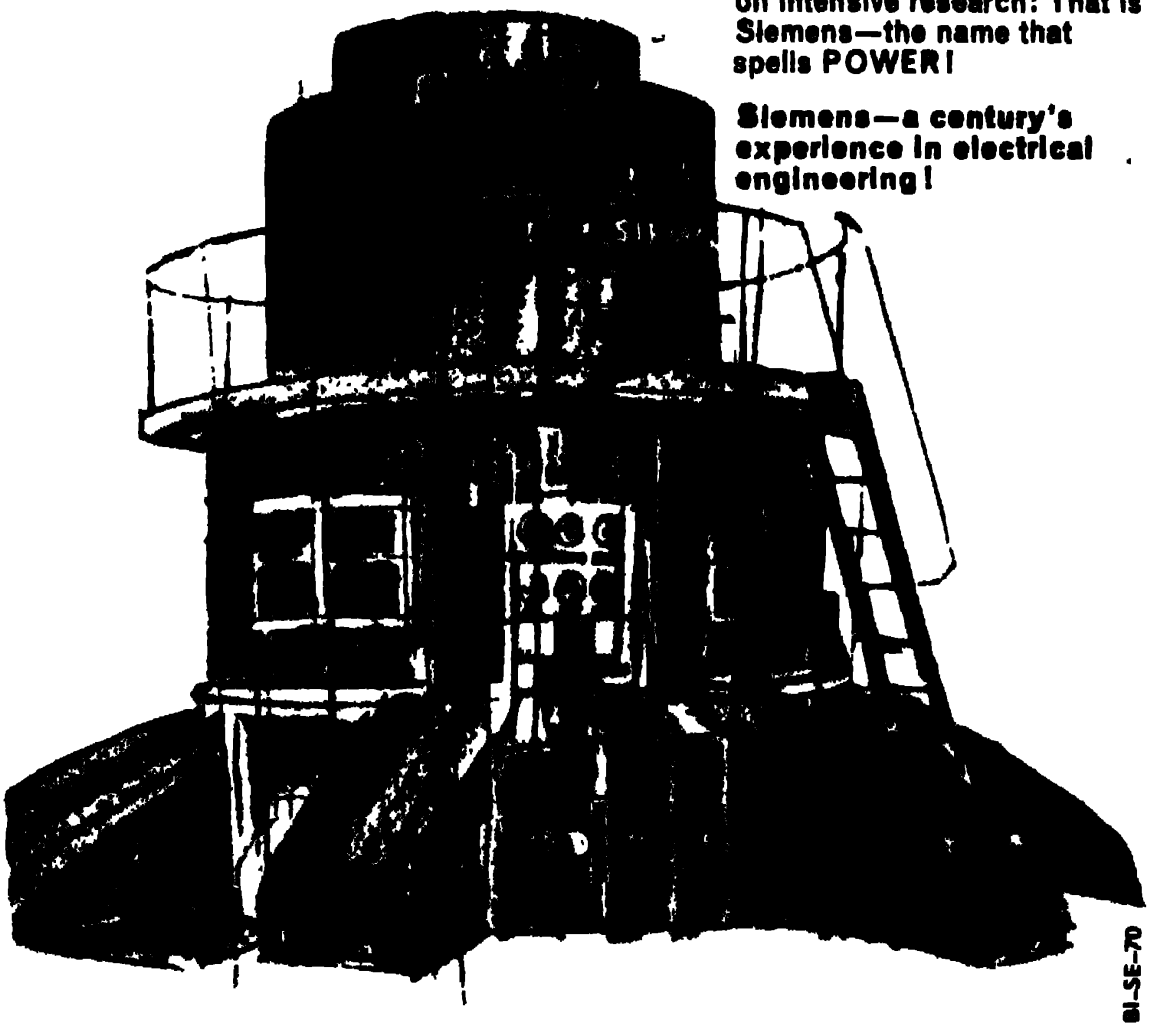
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now, great flags of fire were snapping across the river directly towards the gardens and, as the heart of the tornado arrived, the *porte cochère* became a wind tunnel. Flames, and boiling spray from the river, lashed through it. In the terrible moments that followed, some in the group prayed, while others screamed and moaned. Then, as the wind died momentarily, there was total silence. Dr. Ikeguchi looked at his family and the others. They were all dead.

As the wind started up again, the doctor arranged the bodies of his wife and children on the ground, determined to remain alive long enough to make certain his family received a proper burial. Finding it easier to breathe with his head close to the ground, he began to crawl out of the tunnel. The wind pushed him back, but he fought with every reserve and inched forward slowly.

At last he reached a tree; exhausted, he buried his face in the loose earth around the roots. As he lay there the fiery wind swirled over him. It burned the backs of his hands to the bone; it burned all the hair and skin from the top of his head; it burned off both his ears. But for some reason the coat he was wearing did not burn, and so his body was protected. Moments later he sank into unconsciousness.

From the Yasuda gardens, the tornado moved on to the Army Clothing Depot and did terrible work there. It swept over a corner of the depot where the government had stockpiled material for an elementary school. Pieces of zinc, scaffolding, doors, roofs and carts streaked through the air. A man had his legs broken by a flying telegraph pole. Bicycles took flight and slammed into trees. A police sergeant saw a girl pass by "rolling like a ball." Another man watched in amazement as people were swept into the air like so many beans.

In addition to the fires and furious wind, the tornado held a hidden horror. Wherever it passed, its fires consumed all the oxygen in the air in one great gulp. Thus countless hundreds managed to escape the flames only to suffocate—tumbling together in eerie piles as if they had fallen into a deep sleep.

At last the dragon-twist died away. Rescue parties reaching the scene of the tragedy were stunned by a ghastly, nightmarish sight: acre after acre of ground was covered with corpses several layers high. In the entire area there were only a few hundred survivors—among them Dr. Ikeguchi. The rest of the 40,000 refugees had perished.

Massacre of Innocents

ADMIRAL Yamamoto heard the news of the Army Clothing Depot disaster in the early-morning hours of September 2. The dreadful report climaxed an exhausting, sleepless night, and drove the admiral to a crucial decision.

On the previous afternoon, when

he returned to his home (which was undamaged), Yamamoto learned that his wife had gone to visit their son-in-law and neighbour, Admiral Takarabe. Joining her, he spent the night at the Takarabes' house, trying to complete his Cabinet and keep in touch with events by relays of messengers. By morning, however, a few Cabinet posts remained unfilled. But the Cabinet must be formed immediately; the vacant posts could be held as additional portfolios by other members. After sending out messengers to inform his colleagues of his decision, the admiral made a hurried visit to the Akasaka Detached Palace, where he left a list of his Cabinet. Hirohito quickly approved it.

The formal investiture took place at 7.30 that night. Since the palace itself was considered unsafe, the ceremony was held in a teahouse in a corner of the palace garden. One by one the frock-coated candidates were called into a room where, standing before a gilt screen, Hirohito confirmed the appointments. The room was lit by candles, and lanterns held by the palace guard. In the east the horizon glowed from the still-burning city.

"It was an unforgettable sight," Yamamoto later recounted. "The sky was blazing red, and the dancing reflection of the fires shimmered on the golden screen. It was both beautiful and frightening."

Immediately following the investiture, the Prince Regent added more than Rs. 2 crores of his own money to the rehabilitation fund established by the Uchida Cabinet. Then Yamamoto called a meeting which lasted late into the night.

The main problem facing the new government was the restoration of order. Since the first afternoon of the earthquake, Tokyo and other areas had been under the control of civilian vigilante bands. Drawing their members from among the hotheaded and youthful, these groups had added yet another tragic aftereffect to the disaster, particularly by their treatment of the Koreans.

Thirteen years earlier, in 1910, the Japanese had forcibly annexed the 17 million people of Korea. The Koreans had never become reconciled to the loss of their independence, and relations between the two peoples were marked by uneasiness and distrust. Although Koreans lived in the poorer sections of all Japan's large cities, these immigrant colonies kept much to themselves and were regarded with suspicion.

Shortly after the earthquake, there was a crop of virulent and widespread rumours in Tokyo. On almost every corner one heard stories of Koreans' looting and murdering, and there was even a report that they were marshalling an army to march on Tokyo. This last charge, absurd as it was, was widely believed, and vigilantes began arming themselves with *Samurai* swords, bamboo spears, clubs and knives. Posted at strategic crossings,

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they established roadblocks to search for Koreans.

Physically, there is no great difference between Koreans and Japanese. So the vigilantes, in an effort to weed out the Koreans from the other wandering thousands, frequently asked people they suspected to recite the common Japanese syllabary: *"ba, bi, bu, be, bo."* Koreans could be counted on to pronounce the *b's* as *p's,* and those who did were savagely stabbed, sliced or beaten to death.

To this day no one knows even approximately how many helpless Koreans were massacred in the first two days of the earthquake. Koreans claim their number was 6,000; the Japanese government admits that the vigilantes may have killed 500 people, not all Koreans. But the actual figure is perhaps less important that the final consequence of the massacre.

Although Yamamoto acted at once to control the vigilantes, there was a widespread conviction among Koreans that the Japanese government had condoned the atrocities. This feeling has endured to poison relations between the two countries ever since.

Return to Life

THE SHAMEFUL massacre of Koreans was perpetuated by relatively few Japanese; for the most part the people responded with compassion and calm. Panic was rare, looting at a minimum. The huge crowds that had escaped the fires were in general remarkably well disciplined.

Yamamoto's Cabinet issued a stream of orders granting financial aid, including a reduction in taxes and a moratorium on certain debts. However, many of the government's early attempts to offer assistance were hampered by lack of communications and supplies, and much of the initial relief work was done by plucky individuals.

Throughout the city, doctors and nurses worked around the clock under impossible conditions, saving thousands of injured refugees. Shopkeepers offered free cakes and tea. The owner of a soya-sauce business near Tokyo converted his factory into a relief kitchen, and sent rice, pickles and drinking water downriver to the capital on a motorboat.

At Tokyo Central Station, the manager of the railway engine house managed to save more than 100 trains from fire, anticipating their need for the evacuation of injured. The incredible job was done by locating undamaged spur lines and sidings to which the trains could be moved.

In many cases drivers had to run their engines into flaming areas and hold them there, while yardmen braved the scorching heat to change the points.

The Central Station itself became a refuge for 3,000 people, and room for the overflow crowds was made in storage sheds and parked trains. Berths were removed to serve as

beds for the ill and injured, and several babies were born in the trains with guards acting as midwives.

Among the most nimble-witted heroes of the earthquake was Tetsuzo Inumaru, dynamic young manager of the Imperial, Tokyo's finest hotel. Designed by the then-unknown American architect, Frank Lloyd Wright, the Imperial was brand-new; in fact, the earthquake had interrupted a festive banquet luncheon that was to mark the official opening.*

The Imperial survived the shocks magnificently, but it was almost immediately threatened by fire. Inumaru stationed 100 men on the roof and arranged for them to be supplied by a bucket brigade of another 100 men who drew water from the hotel's lily pond. During the first night of the earthquake, they successfully fought off the surrounding fires.

Thousands of refugees had gathered in Hibiya Park, directly opposite the hotel. Inumaru gave instructions to his staff that they were to be fed. "Don't try to save food," he said. "Use it all up, and I'll find more."

Inumaru was true to his word. When the kitchen cupboards were bare, although he had no cash and the banks were closed he managed to wheedle some money from officials at the Foreign Office. Then he dispatched the hotel's cars to bring in food from the country north of the city, where the roads were passable. Thus twice a day rice balls were served to more than 2,500 refugees, and the hotel's dining-room was open to all without charge.

As the stunned city returned to life, the Emergency Relief Bureau, with a staff of some 700 workers, swung into action. Scores of doctors and nurses made their way to the capital from the surrounding suburbs, and by Monday, September 3, 80 voluntary medical relief teams were working throughout the city.

Communications between Tokyo headquarters and army units on the outskirts of the city were maintained by using 400 carrier pigeons. Some 35,000 troops were soon at work in the stricken capital, the army engineers repairing telephone and telegraph lines, roads and bridges, while other troops brought in food and water.

Most of Tokyo's population was now living in the open refuge areas such as Ueno Park or the Imperial Palace Plaza, and these places soon took on the look of shanty towns as tents and jerry-built shelters of salvaged wood and zinc began to rise.

The grim business of searching for survivors began while fires in

* Shortly after the earthquake, Wright received a cable which made headlines in the United States: HOTEL STANDS UNDAMAGED AS MONUMENT TO YOUR GENIUS. In the confusion of initial news reports about the disaster, the impression grew that the Imperial was almost the only building left standing after the earthquake. Actually, 99 per cent of all the structures in Tokyo survived the shocks.

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The graceful impala (*AEPYCEROS MELAMPUS*) has a practical system of communication when escaping from danger. The alert sentinal gives a high-pitched signal and the herd instantly start their prodigious jumps. The prominent black tufts on the animal's heels flash to the follower the direction of escape.

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the north still burned and before the gutted downtown section was even cool.

For weeks searchers wandered about the ruins, calling out for friends and relatives, or carrying signs with names of the missing.

Most helpless were the lost children—several thousand of them—who were rounded up by the authorities. Many were reunited with their relatives, but hundreds whose parents were never found were placed in special homes.

The problem of disposing of the dead was the most appalling of all. Each ward in the city established morgues where identifiable bodies were held for two days before being sent to mass crematoria. Tons of pine logs had to be brought into the city to feed the grisly fires.

One crematorium was set up on the grounds of the Army Clothing Depot. Petrol was sprayed over the acres of dead bodies, and the fires burned for five days and nights before the dreadful job was done.

"Save Japan"

As NEWS of the earthquake spread round the world, the sympathetic reaction was instant and overwhelming. In fact, although Yamamoto was not aware of it, help had been on the way from the first evening of the disaster.

On the day of the earthquake the U.S. Asiatic Fleet was stationed at Dairen, then Kwantung Leased Territory in Manchuria. The fleet's commanding admiral, Edwin Anderson, learned of the catastrophe when he picked up the despairing radio message from Yokohama. Loading all available supplies, and summoning other U.S. ships from ports as far distant as Manila, Admiral Anderson got under way for Yokohama so fast that when he arrived not quite two days later the ruins were still smoking and oil still burned in the harbour.

The Americans found a freighter in the port loaded with Ford trucks. They promptly commandeered the trucks and were soon moving inland with tons of supplies and medicine. For weeks afterwards these same trucks were among the principal means of transport in the devastated area.

U.S. Marines were also sent ashore to clear debris, build pontoon docks and set up a tent city along the Yokohama waterfront for the refugees.

Less than 24 hours after the earthquake, the U.S. President Calvin Coolidge called for a five-million-dollar relief programme, the money to be raised by individual contributions. That night in New York City thousands of officers of the Salvation Army moved through the streets calling out, "Save Japan!" and selling artificial cherry blossoms to passers-by. Within a few days American donations had reached ten million dollars, twice what Coolidge had asked for. Converted into timber, food, tents,

blankets and medicine, the assistance began to reach Japan within two weeks.

Other nations responded as generously. On September 10, Britain's Far East Fleet, led by the flagship *Hawkins,* steamed into Yokohama with supplies, and was soon joined by French and Italian vessels. Substantial monetary contributions flowed in from Britain (Rs. 47 lakhs), China (Rs. 35 lakhs), Holland (Rs. 7 lakhs), and a host of others including France, Italy, Belgium, Sweden, Mexico and Thailand. The complete list read like a roll call of the League of Nations.

The only sour note in this spontaneous outpouring of sympathy was sounded by Russia, one of Japan's nearer neighbours. On September 12 a Russian relief unit of 69 doctors and nurses arrived in Yokohama aboard the ship *Lenin.* When grateful Japanese authorities hurried aboard to welcome them, they found to their shock that the Russian doctors had orders to treat only Japanese *labourers,* and that the treatment was to include large doses of Communist propaganda. Regretfully the *Lenin* was asked to withdraw. Other contributions from the U.S.S.R. amounted to Rs. 71,000.

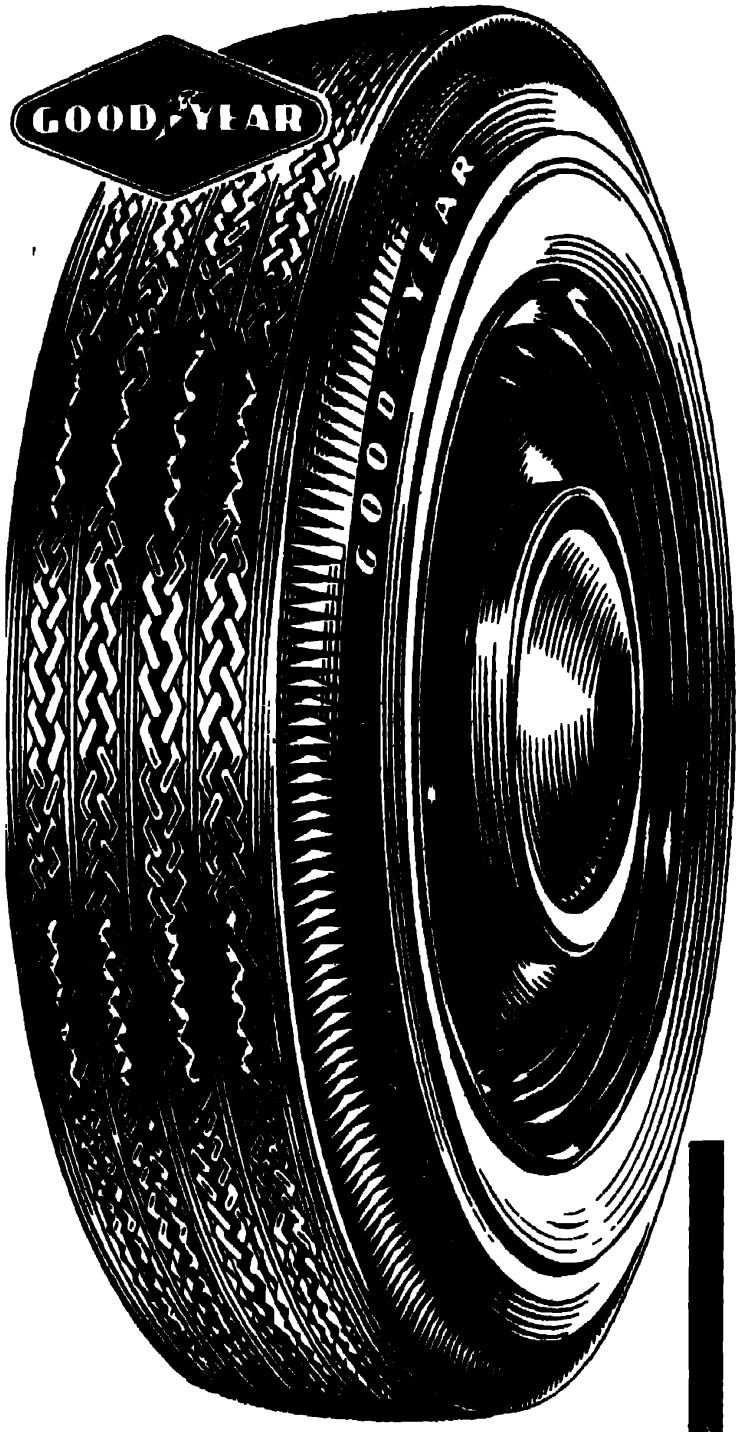
The Eternal Two Minutes

BESIDE the Great Kanto Earthquake, all others pale. The San Francisco earthquake of 1906 was by comparison a minor disturbance. In the San Francisco earthquake about 450 lives were lost. In Tokyo, according to Professor Akitune Imamura of the Seismological Institute, who worked for months to compile his figures, there were 107,519 dead and missing, 42,135 injured. Adding totals from Yokohama and the smaller towns affected by the earthquake: dead or missing, 142,807; injured, 103,733.

In Tokyo alone the fire covered nearly twice the area burned out by the great London, Chicago and San Francisco fires all taken together. Not even the atomic bombs or the incendiary raids created such a conflagration. Of the city's half-million buildings, more than 375,000 were destroyed. Yokohama — which suffered 80-per-cent total destruction—was little more than a black scar of smoking ruins.

To counteract rumours that the ruined cities were to be abandoned, Premier Yamamoto asked the Privy Council to draw up an imperial edict to the effect that Tokyo and Yokohama would be rebuilt on their present sites. The order was received with acclaim, and plans for reconstruction began immediately.

Yamamoto and his Minister for Home Affairs, Count Shimpei Goto, called upon the distinguished American historian Charles Beard to assist in the gigantic task of rebuilding Tokyo. The year before, Beard had spent nearly six months in Japan as head of the Tokyo Institute of Municipal Research; now he returned, fired with visionary



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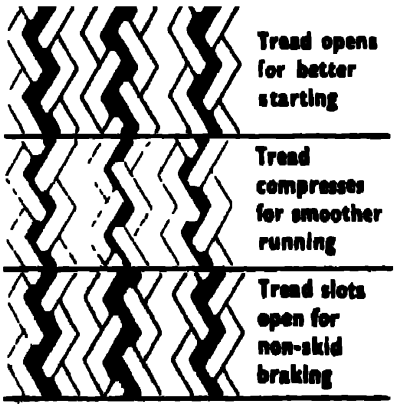
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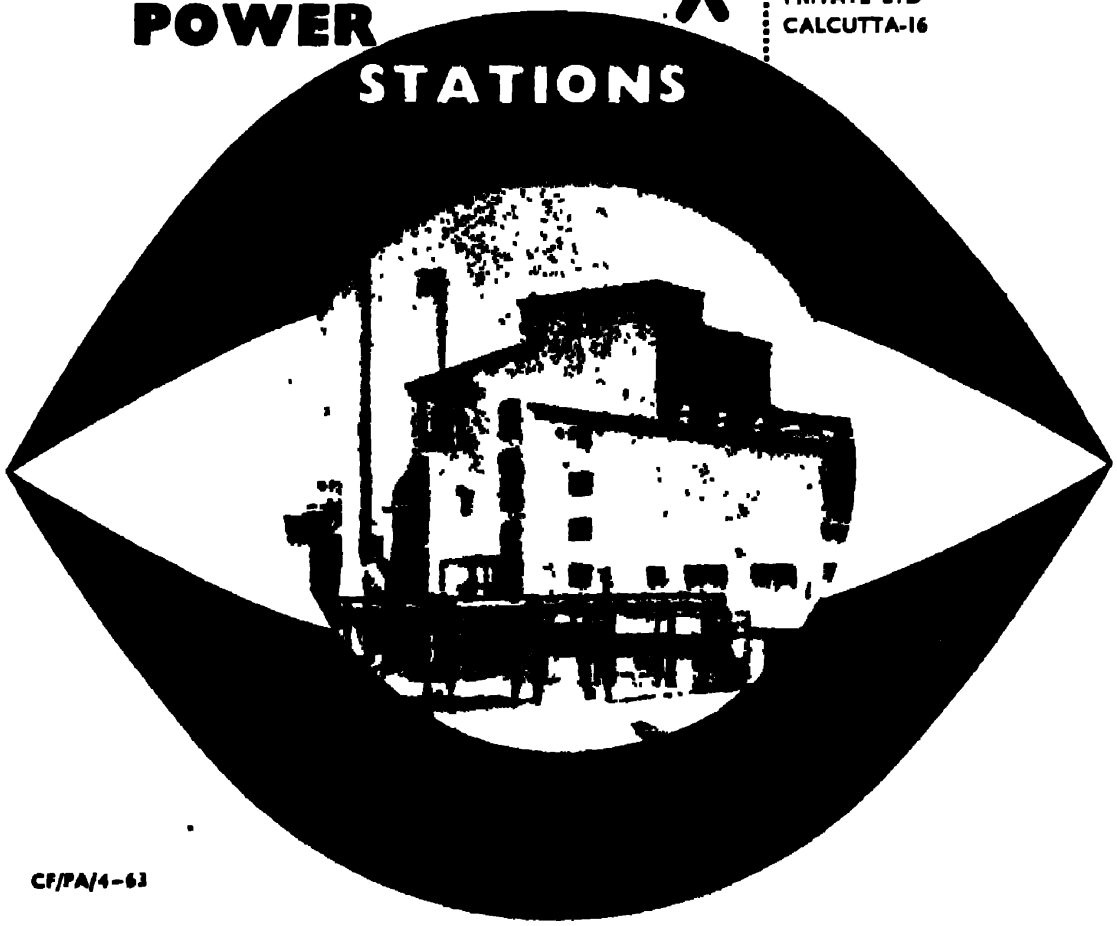
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proposals for a new city of unparalleled magnificence.

The plan that Professor Beard, Yamamoto and Goto drew up called for a beautiful modern metropolis, laid out with wide boulevards, new parks and promenades, and apartment-office buildings which were to be clustered in occupationally segregated districts. The design, however, was destined to remain a dream.

The attempt to resettle people by occupation proved immensely unpopular; people wanted to live where they always had. Furthermore, the exodus of some one million people from Tokyo into the country after the earthquake—a move encouraged by the government—caused such an acute labour shortage that organized reconstruction was nearly impossible.

While Professor Beard's plans grew daily more grand and Utopian, and as committees proliferated, the people themselves began to rebuild the city by their own lights—and in an even more helter-skelter style than before. Slowly the ashes, rubble and debris were swept away, and in vast areas the familiar narrow lanes reappeared, twisting through mazes of pineboard shacks with their tin roofs and packing-case partitions. The good professor could only look on in astonishment and dismay.

Although its reconstruction efforts were limited by this spontaneous rebirth, the government did make some magnificent improvements, including the construction of handsome municipal buildings and modern avenues. But perhaps its most spectacular success was in the establishment of several new parks filled with thousands of weeping willows and cherry trees. One of the most beautiful of these is Sumida Park, which provides a wide promenade along both banks of the Sumida River, near the site of the Army Clothing Depot.

Today the depot itself is largely taken up by commercial enterprises. But in 1923, a few days after the earthquake, one corner of it was reserved for a memorial to all who died in the great fire. Now it is a park which serves as a playground for neighbouring children. Near the entrance there is a small museum which contains mementoes relating to the disaster: a sheet of iron wrapped round the limb of a tree from the Yasuda gardens, a battered bicycle found in a treetop, charts of the fire's hourly progress and the sites of the major whirlwinds. Along the walls is an exhibition of drawings made by earthquake orphans in the art class of their special foundling school.

In the centre of the park stands a three-storey Memorial Hall. There the ashes of 58,000 victims are enshrined in huge urns. On an altar in the centre of the hall burns a flame which has never been allowed to go out.

Each September 1, a memorial

service is held and a crowd of more than 1,000 assembles. As a procession of officials enters the hall, musicians from the Imperial Household play the traditional Old Court music. The last official seated is a prince or a princess from the Emperor's family.

The religious service is conducted by 30 Buddhist priests. After a ritual of incense offerings, one of the priests reminds the assembled crowd that "it is our sacred obligation to remember and dedicate our love to the dead." Then, at exactly two minutes to noon, a small bell rings, and all those present bow in silent prayer. THE END

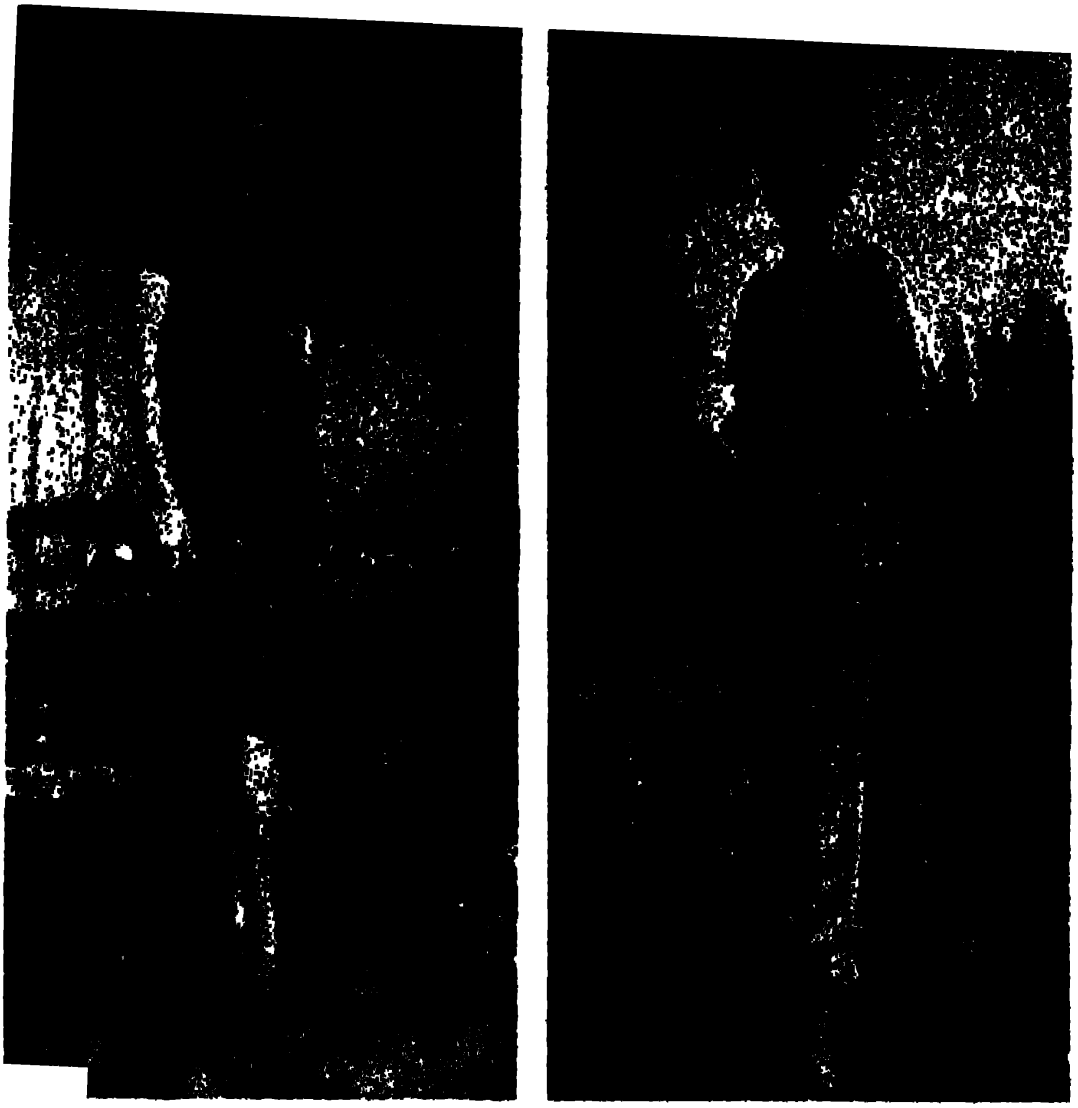
Trial Housewife

At 17 my image of holy matrimony was a fairy tale in which I would be the queen in my own little castle, a dream in which all was bliss and excitement and independence, where housework was done and woes banished as if by magic. But, thanks to my mother, I was awakened from that dream.

I was engaged to a very young electrical-engineering student. We wanted to get married the following spring, when I left school. My parents were greatly opposed. But after many unhappy arguments, my mother suddenly capitulated—on one condition, that I exchange responsibilities with her for a month. If at the end of the month I still wanted to get married, my parents would give their consent. It seemed a reasonable proposal, and I agreed.

So for one summer month I had the sole responsibility for the household. I got up at six o'clock to get Dad's breakfast. I did all the laundry, cooking, shopping and cleaning—everything that Mother had to do in the course of the day. Meanwhile, Mother had the time of her life. She slept till ten, as I often had, enjoyed leisure reading, phoned her friends. By the end of the month my storybook vision of marriage had dimmed considerably. I was willing, albeit reluctantly, to postpone the wedding and face the future more realistically. I took nurse's training while Ted finished his studies, and I'm certain that those three years of waiting, of experience, of growing up, paid off. We've been happily married now for five years, and have a lovely little girl.

Too many young couples look forward only to the joys of marriage, without thinking about all the hard work, the disappointments, the heartaches they are sure to face. Perhaps if more mothers put their daughters through the test mine did, a little helpful realism would be injected into some youthful dreams, and there wouldn't be quite so many broken marriages. —S. S.



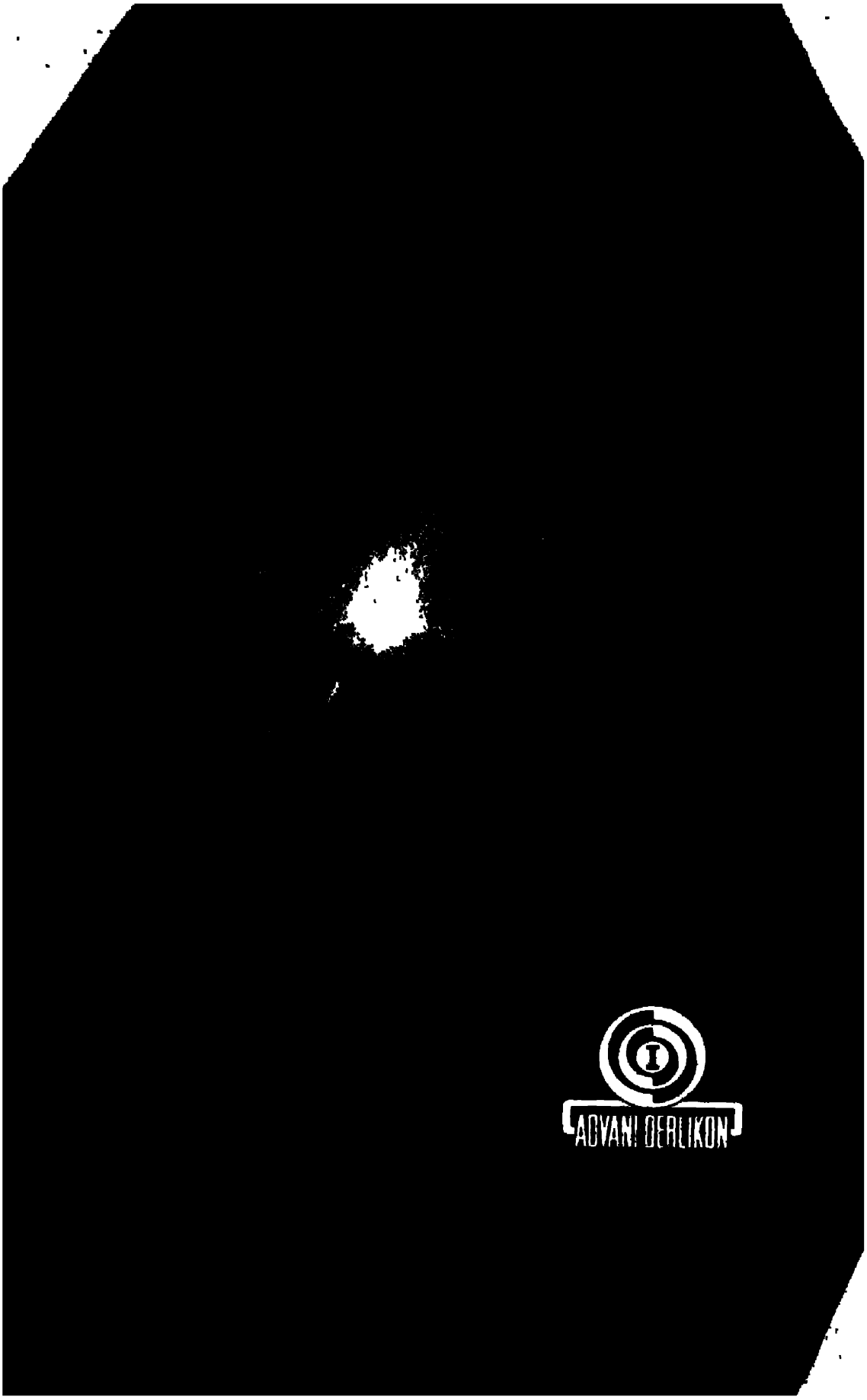
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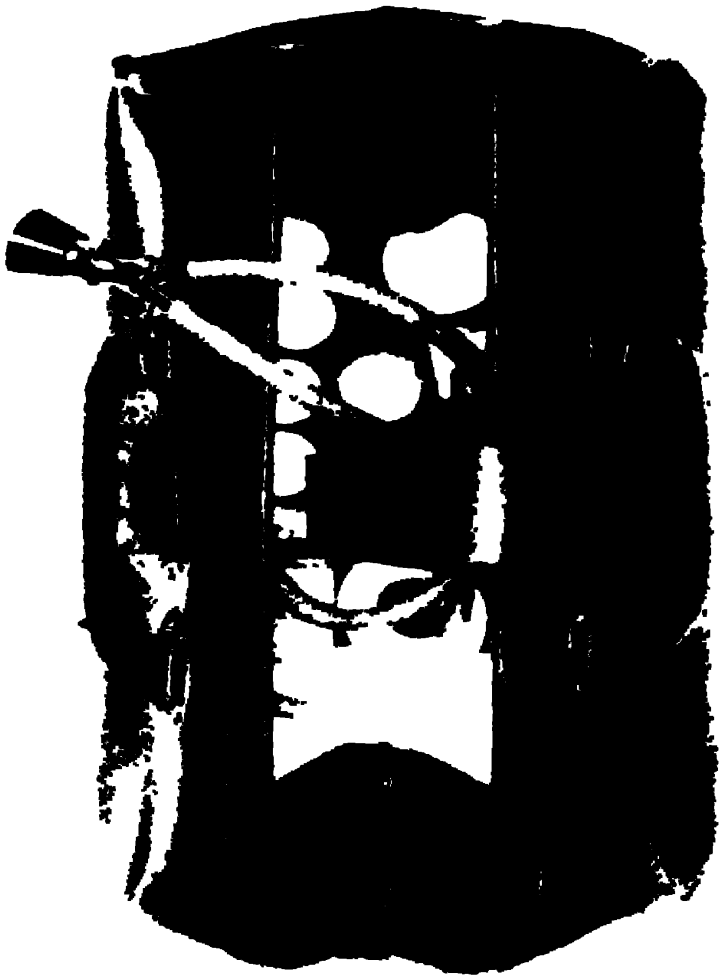
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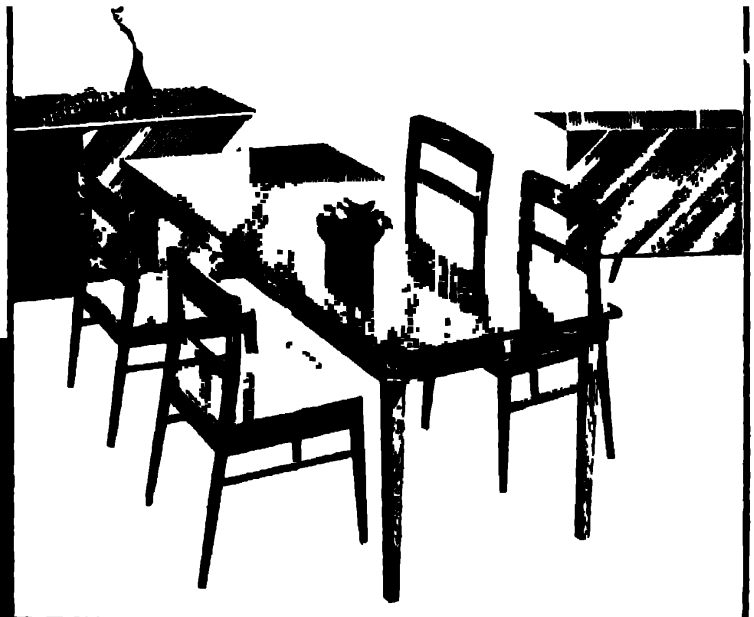


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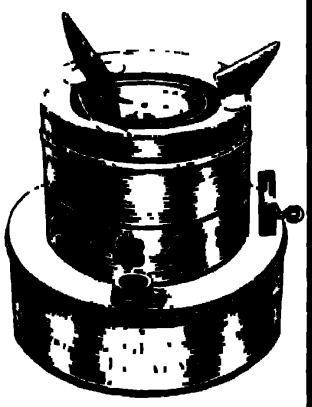
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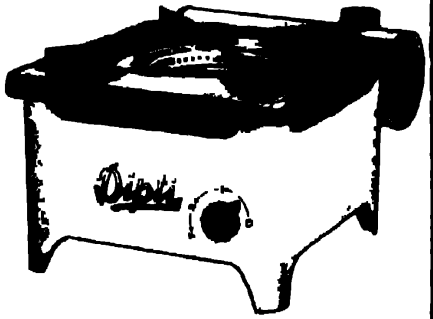
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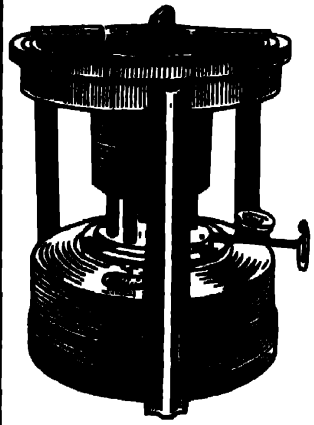


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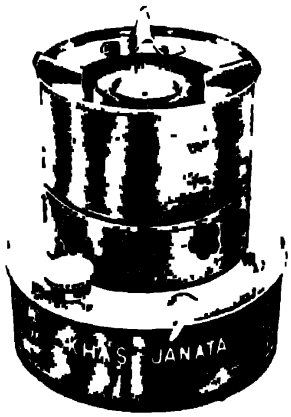


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Laughter *the Best Medicine*

When my son was born, my father-in-law, whose first grandchild it was, phoned the hospital to see how mother and baby were. On hearing his name, the nurse assured him that his wife and child were fine.

"Oh, dear, no," stammered Dad. "I'm not the husband—just the father!" —Mrs. H. P. in *Woman*

Comedian Jack Benny has built up a stage personality as a miser, and somebody is always adding to the legend. Said one wag, "Remember that total eclipse of the sun last summer? Well, during it I saw Jack in a telegraph office—he was sending a night-rate cable." —E. C.

An elderly Englishman I met in Africa was reminiscing about his explorations in earlier days, and the shock of one culture meeting another for the first time. "Can you imagine," he asked me, "people so primitive that they love to eat the embryo of certain birds, and slices from the belly of certain animals? And grind up grass seed, make it into a paste, burn it over a fire, then smear it with a greasy mess they extract from the mammary fluid of animals?"

While I shuddered at such barbarism, he went on: "What I've been describing, of course, is a breakfast of bacon and eggs and buttered toast."

—Gordon Gaskill

Booking into a Rome hotel a tourist asked the receptionist, "What time do you serve meals?"

"Well," the clerk replied, "breakfast is from 7 to 11.30, lunch is from 12 to 3, and dinner is from 6 to 9.30."

The tourist shook his head and said to his wife, "Doesn't leave much time for sightseeing, does it?" —J. S. S.

A henpecked husband complained that his wife was immature: "Whenever I have a bath, she always walks in—and sinks my boats."

—Leonard Lyons

There are four clichés regularly addressed to double-bass players, says my brother, who is one of them. They are:

"What have you got in there, your grandmother?"

"How on earth do you get that thing under your chin?"

"Isn't that a big load for a little fellow like you?" (You can be six foot four, and they'll still throw this line at you.)

"What kind of vitamin pills have you been feeding that fiddle?"

There are, however, a few original souls left in the world. Said one woman spotting a musician who was carrying an unwieldy double-bass, "Well, when you get to where you're going, I certainly hope they ask you to play." —W. M.

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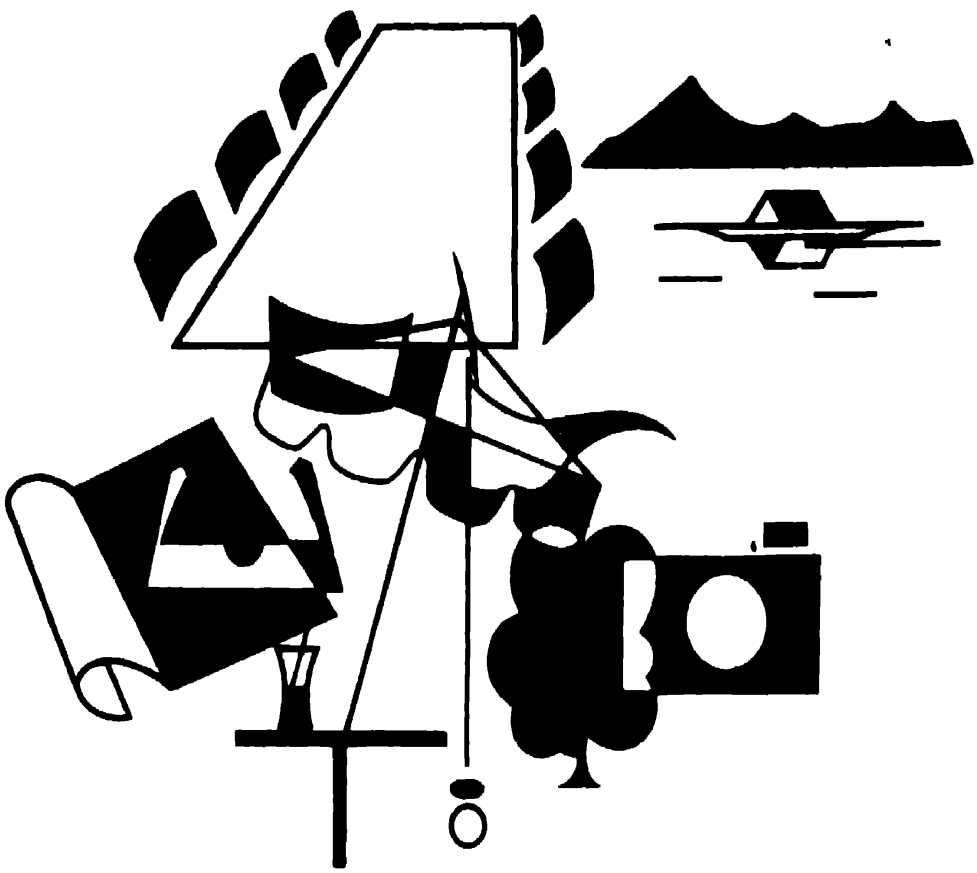
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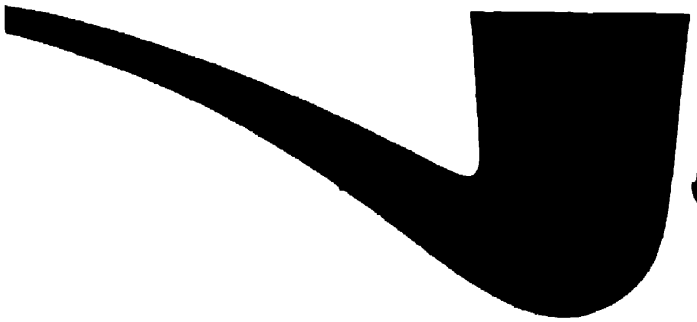
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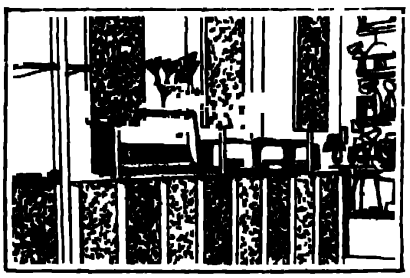
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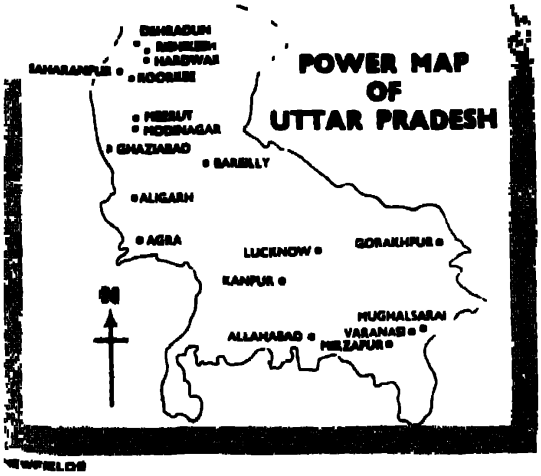
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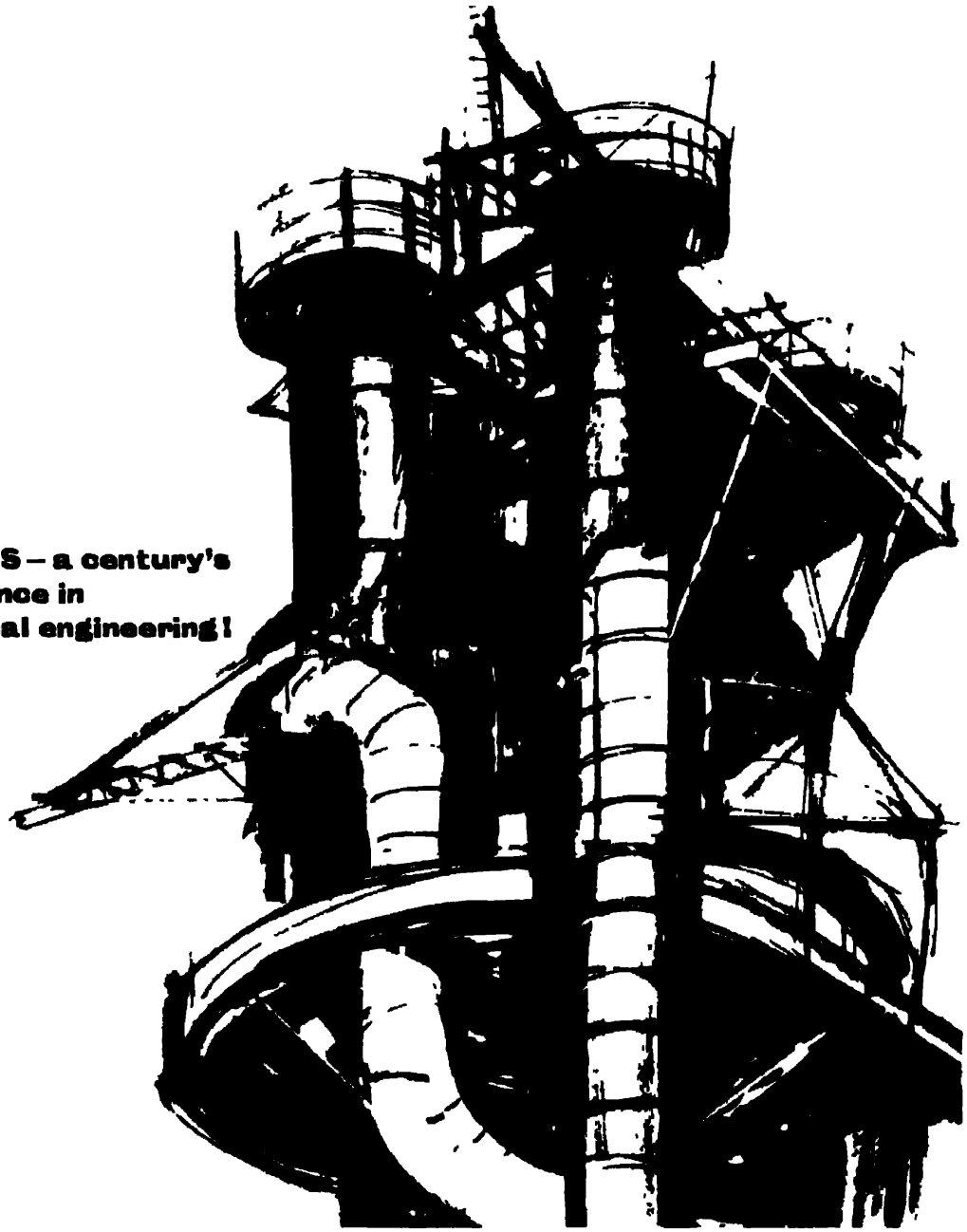
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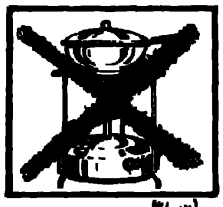
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Just before the Battle of Dunbar Oliver Cromwell made this plea to his men which deserves to be written over the portals of every church, every school, every courthouse and every legislative body: "I beseech ye in the bowels of Christ think that ye may be mistaken."

—John Mason Brown in *Dramatis Personae* (Hamish Hamilton, London)

Manners are like the zero in arithmetic: they may not be much in themselves, but they are capable of adding a great deal to the value of everything else. —Freya Stark in *The Journey's Echo* (Murray, London)

A university teacher whom I knew often managed to develop in his students intellectual interests of which otherwise they would never have believed themselves capable.

In one test, his first question was: "Which of the required readings in this course did you find least interesting?"

Then, after members of the class had had ten minutes in which to expatiate on what was certainly to many a congenial topic, he posed the second question: "To what defect in yourself do you attribute this lack of interest?"

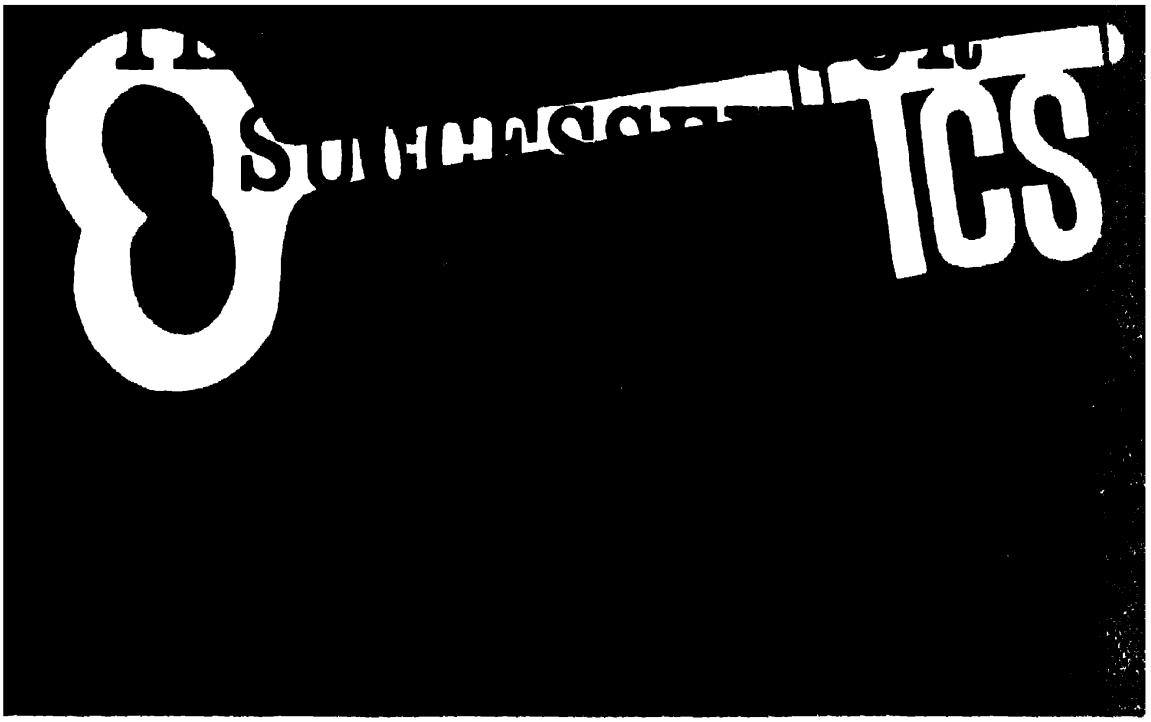
—Joseph Wood Krutch in *More Lives Than One*

There must come the moment when, as Brother Leo wrote, all your mirrors turn into windows. That is the moment of growing up. The adolescent looks inward; the adult can look outward. —Pamela Frankau in *Pen to Paper* (Heinemann, London)

Someone has said that if it requires a person or object to make you happy, you don't know what happiness is. But if you can stand alone in the midst of any hard situation, doing a required or routine task with love and peace in your heart, you know something about happiness. —Gwen Cummings

Thanks to my childhood, I was very disciplined by the time I grew up. I remember the method by which a nurse taught me to sew, when I was only six. After I had darned a sock, she would take the scissors and cut out all I had done, telling me to try again. This was very discouraging, but it was good training.

At school in France, my teacher would read aloud old French sonnets, requiring that I recite them after one reading. When people have asked how I was able to get through some of the very bad periods in my later life, I have been able to tell them honestly that, because of all this early discipline, I inevitably grew into a really tough person. —Eleanor Roosevelt



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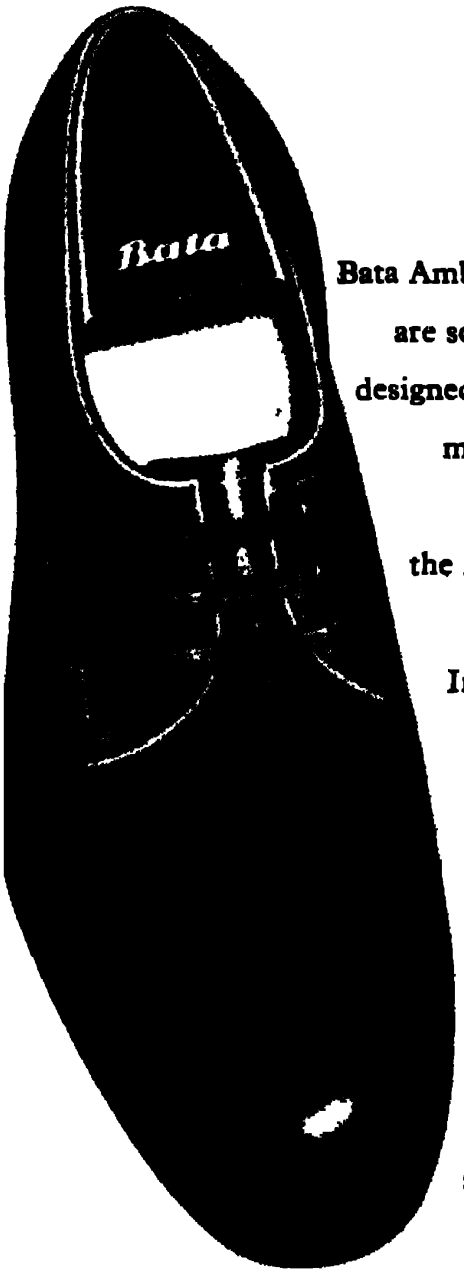


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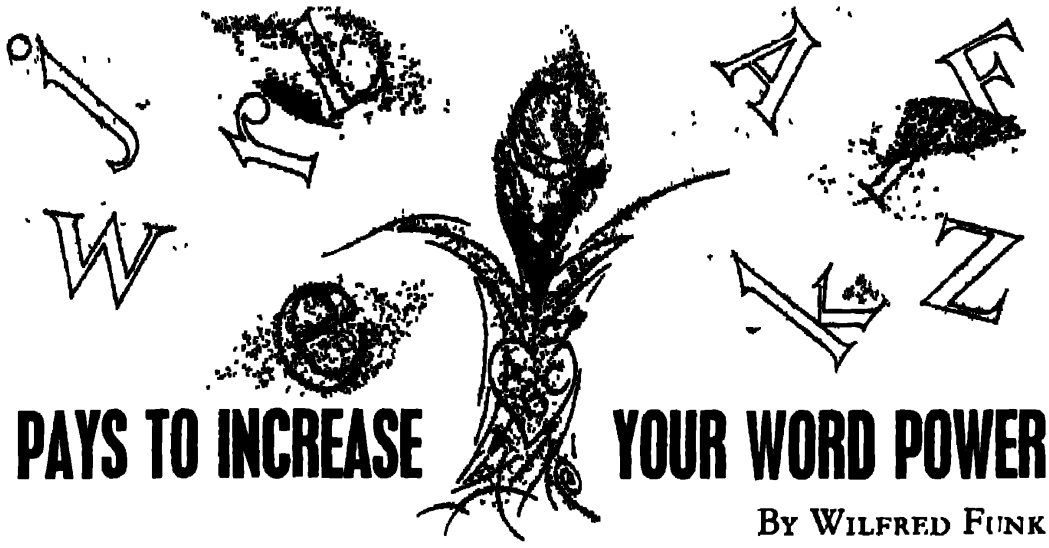
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IT PAYS TO INCREASE YOUR WORD POWER

By Wilfred Funk

IN THIS miscellany of nouns and adjectives, all beginning with the letter *p*, tick the word or phrase you believe is ***nearest in meaning*** to the key word. Answers are on page 12.

(1) **pretext** (prē′ tekst)—A: rule. B: excuse. C: promise. D: book preface.

(2) **penurious** (pe nū′ rĭ us)—A: wicked. B. stingy. C: irritating. D: having no money.

(3) **penal** (pē′ nal)—A: very small. B: accessible to bribery. C: complaining. D: incurring punishment.

(4) **progeny** (prŏj′ e nĭ)—A: ancestors. B: children. C: hopes. D: leaders.

(5) **predominant** (prē dom′ ĭ nant)—A: superior in influence. B. despotic. C: arbitrary. D: underlying.

(6) **privation** (prī vā′ shun)—A: selfishness. B. want of comforts. C: secrecy. D: imprisonment.

(7) **prolix** (prō liks′)— A: highly inventive. B: generous. C: tediously long. D: careless.

(8) **prodigious** (prō dij′ us)—A: enormous. B: extravagant. C: persistent. D: powerful.

(9) **preoccupied**—A: introspective. B: diligent. C: previously contrived or planned. D: lost in thought.

(10) **proficiency** (prō fish′ en sĭ)—A: superficiality. B: strength. C: expertness. D: abundance.

(11) **pecuniary** (pe kū′ nĭ er ĭ)—A: nagging. B. miserly. C: pertaining to money. D: eccentric.

(12) **prevalent** (prev′ a lent)—A: obvious. B: commanding. C: widespread. D: convincing.

(13) **pliable** (plī′ a b'l)—A: tough. B: easily influenced. C: lazy. D: sure.

(14) **pertinence** (per′ tĭ nens)--A: relevance. B: impudence. C: gaiety. D: fixed adherence to a resolve.

(15) **prepossessing**—A: flattering. B: arousing envy. C: attractive. D: greedy.

(16) **puerile** (pū′ er ile)—A: whining. B: deceitful. C: small. D: childish.

(17) **provocation**—A: public announcement. B. prophecy. C: cause of anger. D: denial.

(18) **participant** (par tis′ ĭ pant)-- A: one who takes part. B: foe. C: retainer. D: one who has a preconception.

(19) **protuberant** (prō tū′ ber ant)—A: conceited. B: bulging. C: intrusive. D: gushing.

(20) **proclivity** (prō klĭv′ ĭ tĭ)--A: steep grade. B: unusual skill. C: slight decline. D: natural tendency.

(Now turn to page 12)

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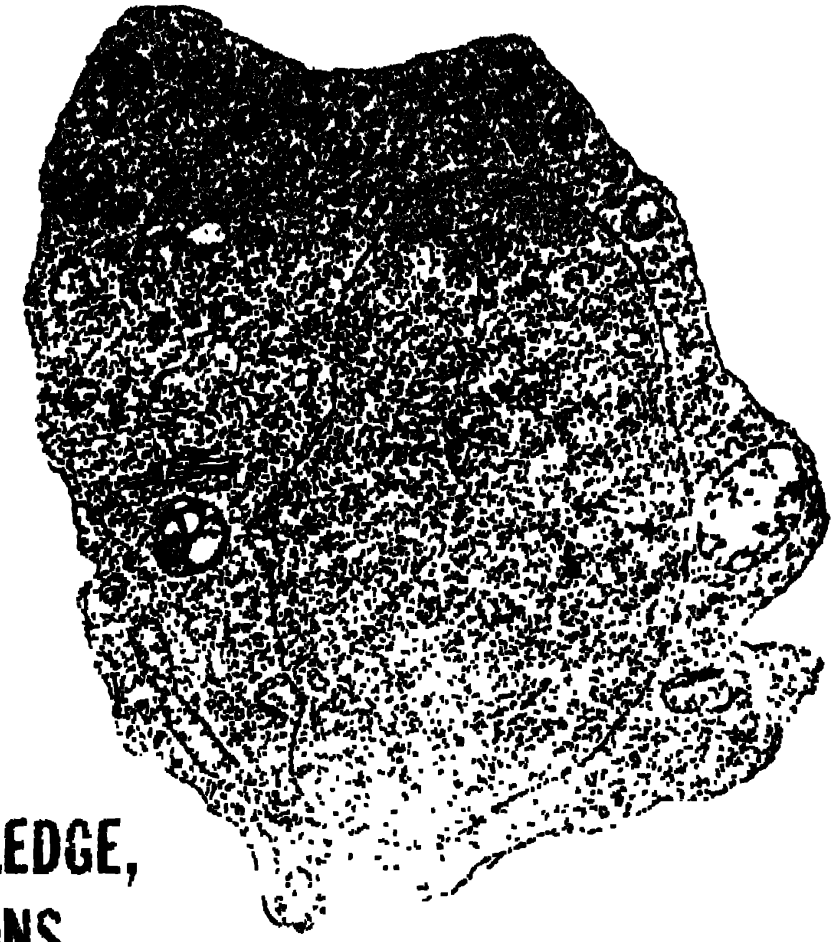
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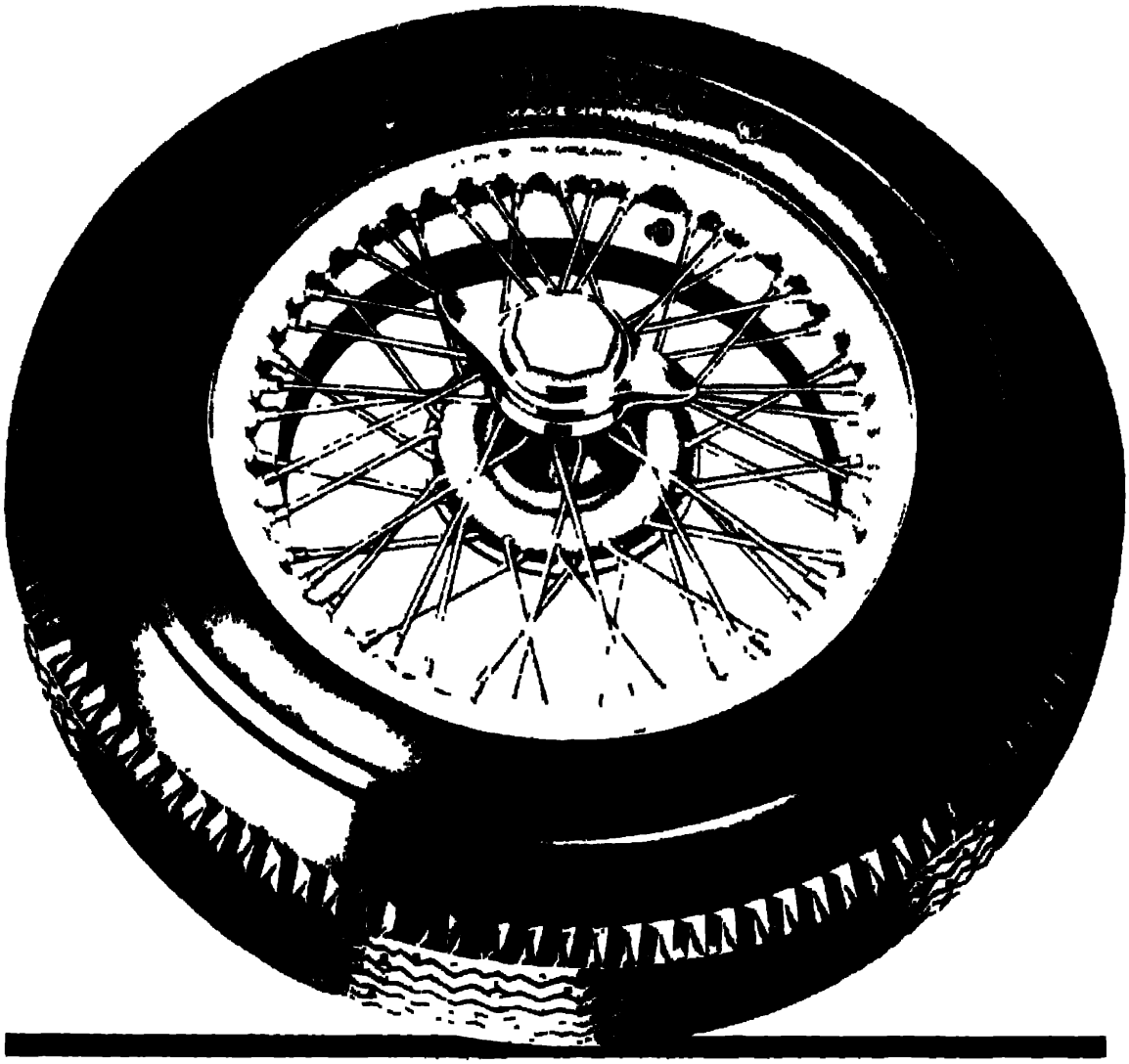
To date, no outright cure for cancer has been developed even though thousands upon thousands of chemicals have been tested in our laboratories and elsewhere. On occasion, a few have slowed the progress of some forms of the disease and prolonged the lives of cancer patients.

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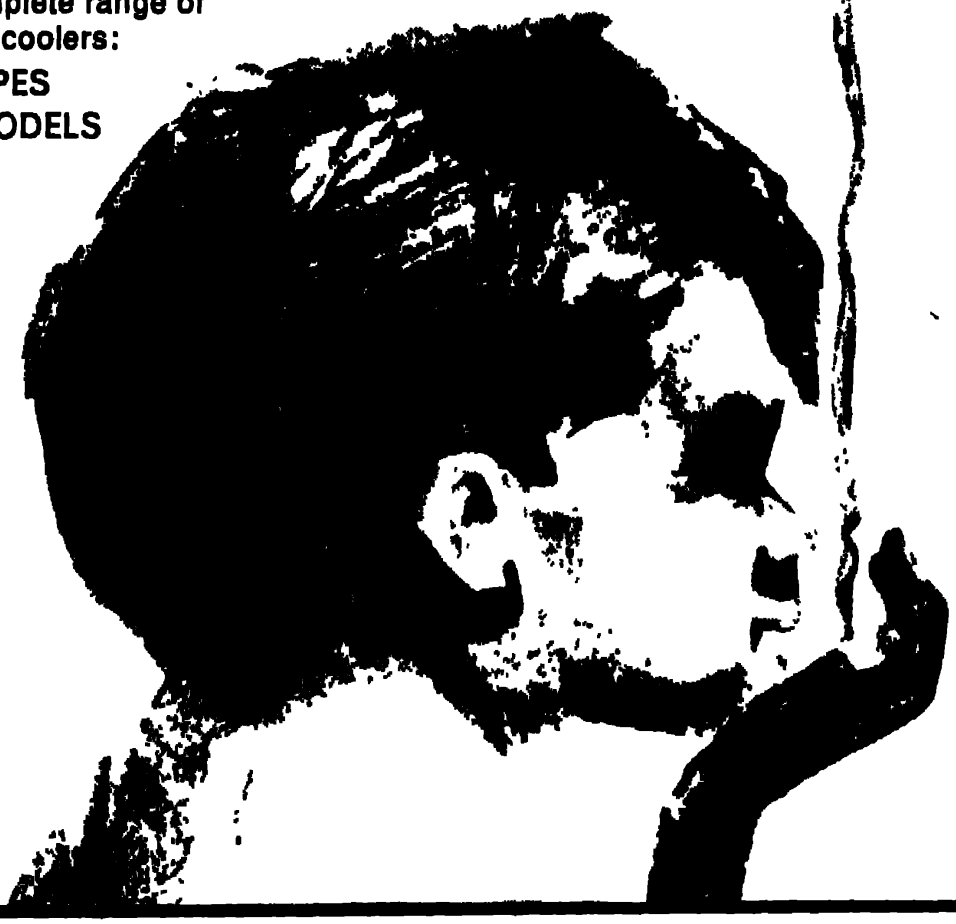
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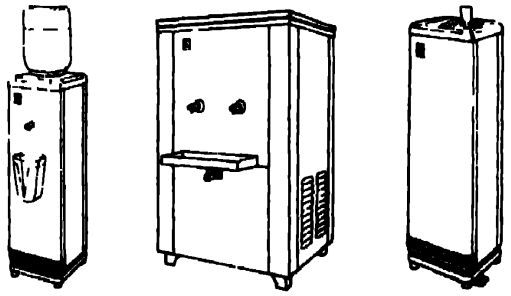
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IT PAYS TO INCREASE YOUR WORD POWER

Answers to the quiz on page 7

(1) **pretext**—B: Excuse; pretence; as, an invasion made under the *pretext* of liberating the country. Latin *praetexere*, "to weave in front of"—and so, to conceal a design or motive.

(2) **penurious**—B: Stingy; sparing in use of money; miserly; as, a *penurious* old man. Latin *penuria*, "want."

(3) **penal**—D: Incurring punishment, liable or subject to a penalty; as, a *penal* offence. Latin *poena*, "punishment," from Greek *poinē*, "fine, penalty."

(4) **progeny**—B: Children; descendants; as, an illustrious *progeny*. Latin *progignere*, "to beget."

(5) **predominant**—A: Superior in number, power or influence; prevailing; as, a *predominant* colour. Latin *praedominari*, "to be master."

(6) **privation**—B: Want of common comforts, as, wartime shortages and *privation*. Latin *privare*, "to deprive."

(7) **prolix**—C: Tediously long; verbose, long-winded; as, a *prolix* sermon. Latin *prolixus*, "stretched out."

(8) **prodigious**—A: Enormous in size, quantity or degree; causing amazement; as, a *prodigious* effort. Latin *prodigiosus*, "strange, wonderful."

(9) **preoccupied**—D: Lost in thought; engrossed; absorbed, to the exclusion of everything else; absentminded; as, a *preoccupied* researcher. Latin *praeoccupare*, "to seize beforehand."

(10) **proficiency**—C: Expertness; state of being well advanced in skill or knowledge; as, *proficiency* in foreign languages. Latin *proficere*, "to go forward, make progress."

(11) **pecuniary**—C: Pertaining or relating to money; as, *pecuniary* gain. Latin *pecuniarius*, from *pecunia*, "money."

(12) **prevalent**—C: Widespread; occurring generally; common; as, a *prevalent* custom. Latin *praevalere*, "to have greater power or worth."

(13) **pliable**—B: Easily influenced and controlled; flexible in character or disposition; compliant; as, a *pliable* child. French *plier*, from Latin *plicare*, "to fold."

(14) **pertinence**—A: Relevance; fitness; quality of being applicable and to the point; as, the *pertinence* of his remarks. Latin *pertinere*, "to belong."

(15) **prepossessing**—C: Attractive; tending to please or arouse confidence; creating a favourable impression, as, a person of *prepossessing* appearance.

(16) **puerile**—D: Childish; silly; thoughtless; as, *puerile* irresponsibility. Latin *puerilis*, from *puer*, "child, boy."

(17) **provocation**—C: Cause of anger or resentment; incitement to feeling or action; as, ample *provocation* for the taxpayers' complaints. Latin *provocare*, "to call forth."

(18) **participant**—A: One who takes part; sharer, as, an active *participant* in civic affairs. Latin *participare*, "to share with, partake of."

(19) **protuberant**—B. Bulging; prominent; sticking out; as, *protuberant* eyes. Latin *protuberare*, "to bulge out."

(20) **proclivity**—D: Natural tendency; bent; inclination, leaning; as, a musical *proclivity*. Latin *proclivis*, "sloping"

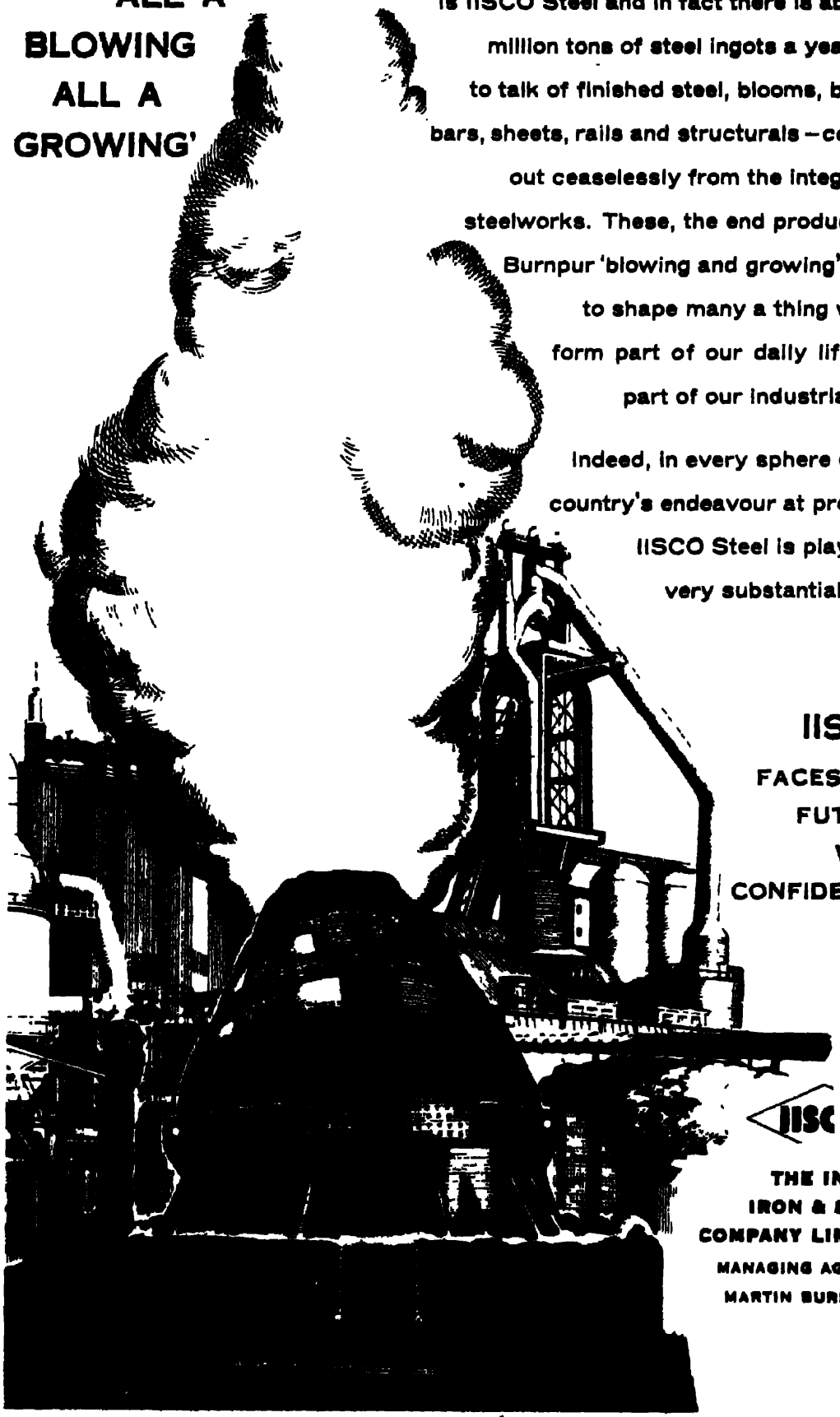
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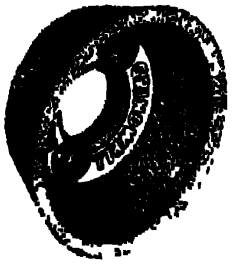
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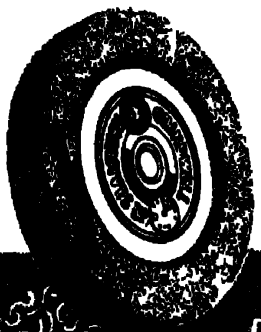
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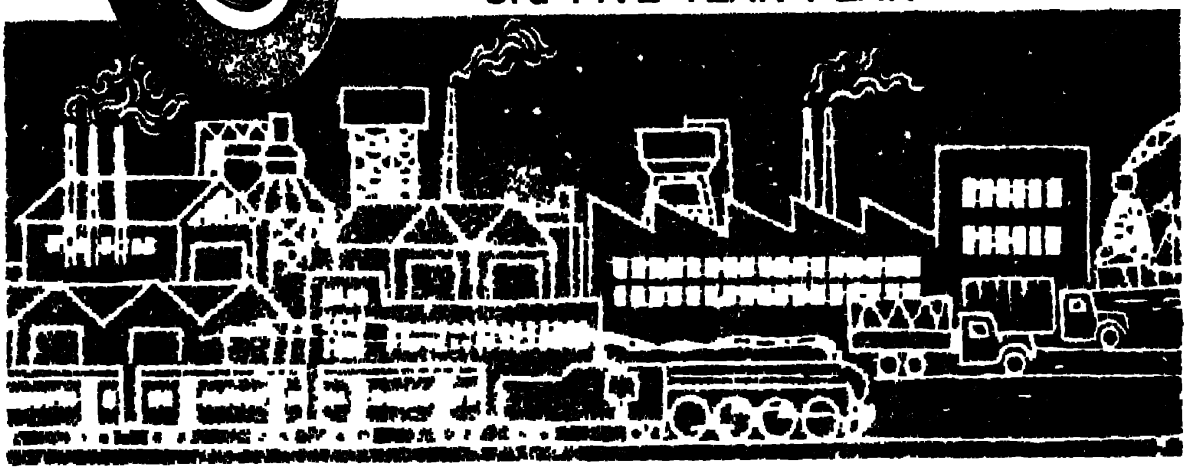


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MORALS FOR MODERNS

Sometimes we forget that each generation must refight the old crucial battles, on its own battlegrounds, and so discover its own truths

By John Gardner
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Jacques Barzun tells of the old lady who complained that "the modern thunderstorm no longer clears the air." It is an attitude that is not confined to old ladies, or to meteorological subjects. Listen to these melancholy lines:

To whom can I speak today?
The gentle man has perished
The violent man has access
to everybody.
The iniquity that smites the land
It has no end.
There are no righteous men
The earth is surrendered to
criminals.

The writer's nostalgia for an older, gentler, more righteous time strikes us as very modern. But the poem was written by a man contemplating suicide some 4,000 years ago, in Egypt's Middle Kingdom!

It is an abiding characteristic of man to believe that the old virtues are disappearing, the old values disintegrating, the old, good, stern ways no longer honoured. Many people today seem to think that our morality, our devotion to virtue and justice, resemble a reservoir that was filled long ago (vaguely, about the time of our grandfathers) and has been seeping away ever since. But our grandfathers thought that the reservoir had been filled by *their* grandfathers and had seeped away ever since. And their grandfathers thought the same. Why isn't the reservoir empty?

The answer is that the moral order undergoes regeneration as well as decay—a continuous "recurrence of birth," offsetting death. Men are always corrupting the old symbols, drifting away from the old truths. But while some are losing

their faith, others are achieving new spiritual insights; while some grow slack and hypocritical, others bring a new meaning and vitality to moral striving.

And that is how most of us play our role in the reshaping of our society's values. The Swiss philosopher Amiel said: "Every life is a profession of faith. Every man's conduct is an unspoken sermon that is for ever preaching to others."

Young people do not assimilate values by learning words (*truth, justice,* etc.) and their definitions. They learn attitudes, habits and ways of judging—in personal transactions with their family or associates. They do not learn ethical principles; they *emulate* ethical (or unethical) people. That is why young people need models of what man at his best can be.

Each generation, presented with victories that it did not win for itself, must itself rediscover the meaning of liberty, justice—"the words on the monuments." A generation that has fought for freedom may pass that freedom on to the next generation. But it cannot pass on the intense personal knowledge of what it takes to win freedom.

In some cases young people find that the moral precepts their parents offer are no longer relevant, or are contradicted by the parents' behaviour. This is not catastrophic. The first task of moral renewal is to strip the encrustations of hypocrisy from cherished ideals. Young people, with their freshness of vision and rebelliousness of mood, are very well fitted to accomplish that.

One of our most difficult problems is to make it possible for young people to participate in the great tasks of their time. Opportunities for constructive outlets are rare. Alexander might conquer half the known world in his early twenties, and nineteenth-century seafaring lads might be sailing captains in their late teens; but in a complex technological society the stress is on long training and experience. All too often, when we seek to evoke the moral strivings of the adolescent today, the best we can do is to invite him to watch over a drying reservoir. Instead, we should be telling young people the grim but bracing truth that it is their task, facing the dilemmas and catastrophes of their own time, to *re-create* the cherished values in their own behaviour. We should be telling them that each generation refights the crucial battles and either brings new vitality to the ideals or allows them to decay.

In short, the moral order is not something enshrined in historical documents, or stowed away like the family silver. It is a living, changing thing, and never any better than the generation that holds it in trust. A society is continuously re-created, for good or ill, by its members. This will strike some as burdensome, but it will summon others to greatness.

Condensed from "Self-Renewal. The Individual and the Innovative Society," © 1963, 1964 by John W. Gardner. This material also appears in Saturday Review

This supersonic manned missile is equipped for treetop tactics that make it an unstoppable deterrent



"GO-CODE" MISSION ABOARD THE B-58

By Francis Vivian Drake

The sentry keeps his hand on his .45 while he challenges the combat crew at the gate of the flight line. He examines each badge carefully, as always, then introduces a new wrinkle. He addresses the plane commander: "Will you step out of the car and speak to me, sir?" This is to make sure the commander is not being held hostage with a gun at his back.

Satisfied, the sentry waves the car past a cordon of armed men into one of the tightest security zones in the world, the Alert Area of America's revolutionary low-level bomber, the supersonic Convair B-58 "Hustler."

This plane is in effect a manned missile, fast and deadly. But it is in pitiably short supply. Like all SAC bombers and missiles, it is guarded

night and day to prevent sabotage. In Texas, a few hours before his death, President Kennedy called the B-58 "the finest weapons system in the world today."

The B-58 is above all a thing of speed. It clocks 1,324 m.p.h. at 35,000 feet and has captured 11 world speed records, five of which were formerly held by the Russians. It has flown from New York to Paris in three hours, 20 minutes. It can reach any target in the world without landing to take on fuel, and recently demonstrated its range by flying from Tokyo to London, 8,028 miles, in eight hours 35 minutes, counting slowdowns for five aerial refuellings.

The slim bird looks deceptively small, but it is very big. It packs four huge turbojet engines, weighs 90 tons and is 97 feet long. It is designed to penetrate enemy territory at high speed close to the treetops, *beneath* the new missile defences which face older bombers like the B-52.

Its needle-sharp "Coke bottle" fuselage curves in slightly at the waist, enabling it to pierce the sound barrier without shock. The delta wing is near the tail, dart-shaped and made of stainless steel, fibreglass and aluminium sandwiched together to withstand supersonic frictional heat and the turbulence that buffets a plane close to the ground. A giant "pod" slung under the belly is designed to carry a nuclear weapon much larger than can be carried in most unmanned missiles. Only three men make up the crew; the plane's inner skin is walled from top to bottom with computers to help handle the lethal monster and achieve pinpoint aim.

This afternoon one of the two existing wings of B-58's is to execute a full-scale "scramble" to thwart a supposed attempt to destroy them on the ground. It will be assumed that the Ballistic Missile Early Warning System has detected a cloud of missiles headed for the United States from 6,000 miles away. Time from BMEWS warning to explosion of the missiles: 15 to 20 minutes.

It is four o'clock when a klaxon screams the alert through the base. Men stream from the alert hut, run to their planes or leap into waiting cars that tear down the mile-long hangar line, horns blaring. All other traffic stops. Two minutes and ten seconds from the klaxon the first B-58 rumbles up the taxiway, its crew feverishly checking the 69 take-off items on their clipboards.

At this point no one on the base has power to cancel the alert; even if the wing commander dashed to the head of the line, arms outstretched, the pilots would roll right over him. As each plane hits the Active Runway the pilot lights the afterburners. Long flames shoot from the exhausts; the metal hangar walls sway with the thunderous shock wave. In less than ten and a half minutes 20

planes are high in the air. No act of war has been committed. No missiles have been fired to wreak devastation without chance of recall; but the B-58's are safe, and no power known could prevent them from hitting their targets.

Each plane flies a lone mission. Nightfall finds one of them approaching the North Pole, ten miles up. Vast bands of prismatic light —the aurora borealis—weave and flow from horizon to horizon. The pilot's cockpit is whisper-quiet, for the plane is outrunning its own sound. Banks of instruments glow dull red. The pilot's eyes sweep them from right to left as if he were watching a slow-motion tennis game. He has no co-pilot, for every inch of space is at a premium. If he is disabled, no one else can land the plane. Far behind him are two crowded compartments, one for the navigator, one for the defence-systems operator. They cannot see one another; each is walled in by switches and computers. They communicate by intercom or exchange written signals by a "clothes-line" hung with clips, running along the floor. For eight or ten hours the men are jammed in their seats, unable to move more than inches. In the event of critical danger, the only way to get out is to be blown clear by a small shell.

These men are super-professionals. Each has been in the Air Force at least ten years; each is a deeply responsible man who holds the fate of millions in his hands. Together they must take their instrument-filled blowlamp for thousands of miles, sometimes at twice the speed of sound, and hit their target at precisely the minute prescribed in their orders. They achieve precision at the risk of their lives, for it is perilous to fly so fast low down. Near the ground the atmosphere swirls and eddies above hills and rivers. Rough air slams into the plane from all directions, and a moment's inattention may lose 1,000 feet and smash them into the ground.

Tonight they almost reach the Pole before a typical crisis hits them. The emergency is signalled by brilliant letters, *"Warning!"* glowing above the instrument panel. At the same moment, a sexy female voice fills the cockpits. "Number 3 generator failing! Number 3 generator!"

This is called Voice Interruption Priority System, designed to shock the crew to instant attention. A computer has caught a malfunction, a speeding tape has spun to the right portion, and the girl's cry is ringing through the plane within seconds. All heads turn to a board of lights on the right side of each cockpit. Sure enough, Number 3 is glowing red. The defence-systems operator's fingers fly across the banks of switches, picking out substitute currents.

"DSO to pilot. Number 3 generator decoupled. Number 2 cut in.

System now normal. Everything A-O.K."

The navigator, sandwiched in the centre of the plane, deals in uncanny exactitudes. Because the gigantic bomb must be dropped from an absolute spot in space, he must know where he is almost within yards. Three remarkable instruments help him.

First is the Astro Tracker, pointed through the astrodome at the sky. It has two little telescopes. One is "locked on" the star Arcturus, the other on Vega. If the plane wanders as much as one-tenth of a degree off course, computers instantly sound the alarm.

Second is the Doppler Indicator. This flashes a radar wave ahead, behind and sideways, and by timing the minute differences in their echoes shows the distance run from base.

Third is the inertial guidance system, built around a high-precision gyroscope which records every movement from take-off. Together, these three instruments feed their readings into computers, the computers reset the flight indicators, and the result is a second by second fix.

Now the B-58 is coming to the most crucial point of its mission—the approach to an invisible silent wall surrounding Russia—the Positive Control Line. Beyond this line in space the bomber may not go except in event of war. The navigator knows where the line is. He knows where his bomber is. He is close to the turning point, but he asks no question. It is not necessary. Everything is on a pre-arranged timetable.

In SAC's war room, the commander-in-chief continuously follows the progress of the SAC bomber fleet on "flow charts" projected on giant screens. He has complete control, and his duty officers can put him in almost instant contact with any SAC bomber aloft. Were SAC headquarters to be destroyed, three deputy commanders are on duty in three far-apart command posts. Should all be destroyed, a command flight called Looking Glass has a plane in the air night and day, 365 days a year, manned by another deputy with radio communication throughout the world.

All the generals are linked direct with the White House, the Joint Chiefs and the Secretary of Defence. All communications are duplicated and reduplicated to prevent failure. The bomber is under "positive control"; it must turn back before it reaches the Positive Control Line *unless*—and this is an enormous *unless*—SAC should issue the most dreaded signal in the world, known as the Go-Code.

This fateful message has been the subject of cruel sensationalism masquerading as truth. It has been alleged that if SAC's radio were to fail, if the bomber were not recalled, it would go right to its target, and total war would start by accident. This is false. The bomber can attack only after receiving the highly secret

Go-Code. If the message were ever sent, if the attack were ever made, this is how it would happen.

The commander-in-chief of SAC, the U.S. President, the Joint Chiefs, the Secretary of Defence all confer on special circuits that are guarded night and day. The President makes a final decision. Orders are given to SAC's commander-in-chief and relayed to the controllers on duty in SAC's war room. Only then, after all the checks have been made, can SAC send the fateful signal that goes out on all frequencies:

"SAC to all planes, SAC to all planes. Go-Code follows." Then come the secret words and numbers.

Aboard a B-58 each member of the crew carries a sealed deciphering package round his neck. He copies the coded message, breaks the seal, determines authentication, deciphers the message and sends it down the clothes-line to the others. All compare visually. If one man disagrees, the plane goes home; but, if all agree, the die is cast. No further message, no Presidential word, nothing, can take it back. It is the nightmare come true.

All three men must act separately to arm the weapon. Now, if it is dropped or if the plane crashes, it will go off. The throttles are pushed forward. It is 60 below zero F. (50 below zero C.) outside, but as the plane travels at twice the speed of sound, the wing heats up to 260 degrees F. (127 degrees C.); the crew compartments become sweat baths, the refrigerating systems are turned on. The plane plunges through the imaginary silent wall. Beside each man is a red book, defining every move from then on. The crew knows the book by heart.

The War Plan defines exact height and speed of every plane. The explosion of each bomb is timed to the minute. The B-52's, in the attack too, will go in either high or low, working their Electronic Counter Measures to block enemy radar. But how many will get through? Ground-to-air-missiles are improving, enemy interceptors are getting faster and heat-seeking missiles have been invented which fly right up the exhaust pipes. There is one sure way to defeat this enemy resistance; to go *underneath* his defences, his radar, his missiles, his planes, and it is at this treetop tactic that the B-58 excels.

"Navigator to pilot. Descend to 10,000 at 4,000 feet a minute." The altimeter swings round. "Level for check. O.K., O.K.—down to 1,000."

Now they are below the radar-detection cones. If they fly right over a radar station at the base of the cone, the blip will be too short for the enemy to get off an anti-aircraft missile. Coastline appears on the screen. The navigator matches it up with his maps. The Astro Tracker holds the plane dead on course. "Initial point recorded! On course. Down to 700 feet! Roll down the flash curtains!"

Tension increases unbelievably,

for now the flying must be uncannily exact. The slightest movement on the controls and the speeding plane will lose its precious margin above the treetops and be consumed in its own explosion. It is all but invisible. Fighters looking down cannot see it because their radar screens are snowed up with "ground return." Observers looking up cannot get sufficient warning. Even if a watcher picks up the silent dot hurtling towards him above the treetops, it will be over him and away in five seconds. Course is changed every few minutes to prevent ground stations from phoning ahead for interception. Heading is altered constantly to avoid hills or buildings and to keep away from bombs being dropped by high bombers.

The navigator reports to the pilot. "One hundred miles from target. Six minutes—target set in. Second station, *now!*" Second station is the automatic bombsight that clutches into the controls and takes over the flying.

"Target top of scope!" The navigator has known it by heart for years. Models have been made and photographed by radar to show him exactly how it will look on his screen. He adjusts the crosshairs delicately.

"Countdown coming, 200 seconds to release!" If a random shot hits them now the bomb will go off automatically. "Sixty—forty—twenty—zero!" There is a slight bound as the weapon drops.

In war, the plane will fly straight past the target. There are secret methods to slow the detonation until the bomber gets away. An unearthly glare will penetrate the flash curtains. Then the only radio signal to SAC will be made. "SAC Control—Number X reporting. Weapon exploded on target. I say again——" There is no need to report that the target has been destroyed.

Such "profile" missions are practised constantly over the United States (the only difference is that the plane never carries a bomb). Almost every night a B-58 streaks across the country, making intricate changes of course at low level to simulate a war mission. Towns are picked because they resemble checkpoints to some war target, all are warned of the noise beforehand. One B-58 recently hedge-hopped 1,400 miles, never higher than 500 feet above the ground, and "bombed" its target on the nose.

The leaders of SAC, the men who command both planes and missiles, believe that the new low-level technique has enormously increased their ability to prevent war because it offers two immense advantages over unmanned missiles.

First, *reliability*. To prevent war, the enemy must remain convinced that if he strikes, nothing can save him from retaliation. Missiles may not always be able to promise this. The Soviet Union claims to have perfected an anti-missile missile that will knock any high-flying weapons

out of the sky. America's Nike-Zeus has already made ten successful interceptions of U.S. intercontinental missiles.

Even more potent may be a new effect which may abort a missile before it leaves the ground. It is possible that if a very big weapon, such as already detonated by the Russians, were to explode above one of America's missile silos it would not destroy the missile itself but might paralyse the radio guidance, and thus wreck the aim.

Moreover, an ICBM cannot think. It cannot ferret out its target. It can only follow a pre-set trajectory, like a cannon shell; it cannot turn, twist, attack from 360 degrees around the compass, like a bomber. By contrast, as long as bombers can be launched, the ability of their crews to destroy the enemy remains unquestioned.

Second, *flexibility*. Once a U.S. President orders the Atlas, Titan or Minuteman missiles launched, they cannot be recalled. If enemy missiles were falling, instant decision would be a foregone conclusion; but suppose there were a threat of imminent war, perhaps an attack on West Berlin? What President would take the irrevocable step of firing missiles, knowing that the enemy riposte would strike his own country within the hour? Manned bombers, on the other hand, would give him four or five hours' leeway, all the while advertising to the enemy that inescapable retaliation was in the air.

These considerations trouble U.S. Air Force planners deeply, because today, for the first time in the nuclear age, America has no bombers in production. There are still about 600 B-47's, but they are over ten years old and being retired, as well as over 600 B-52's, but construction ceased in 1962. There are only about 80 B-58's, and production stopped two years ago.

Many people wonder if, in the anxiety to close the "missile gap," America may have committed too much of its national safety to inanimate missiles. For whatever their merits, no mechanisms can match the effectiveness of skilled men.

Brain Wave

MY HUSBAND IS the proprietor of one of our town's bowling alleys. Faced with an unusual number of personal problems, he decided to seek the advice of a local psychiatrist. After a number of weekly sessions he seemed more cheerful. "Do you think he's helping you?" I asked. "I'm not sure yet," he replied, with a grin. "But I've got the psychiatrist bowling now."

—M. G. A.



Down with the Lark!

An answer to those who believe that stuff about the early bird and the worm

By Philip Curtiss

For several years I have found myself toying with a secret desire to build a hut and start life anew in some not too remote wilderness. In my case this was, until recently, somewhat puzzling because I was already living in a fairly rural spot, and furthermore, I had few of the talents of the naturalist or woodsman. I knew or cared little about the habits of thrushes and such-like, while my efforts with the frying pan were inept and ludicrous. It was not until I followed the teachings of the newer psychology and probed my soul for its basest motive that, eventually, I found the answer. Then I realized that I longed to abandon all humankind and set up housekeeping in the woods merely in order to sleep as late as I liked every morning.

At first sight this also seemed to be without logic, for woodsmen, of all people, are popularly supposed to be up with the dawn, plunging into icy lakes and singing yodels, but, nevertheless, my instincts had argued truly. Experience had taught them that what interfered with a natural, human desire to get one's due rest was not quietude but social tradition. Wherever I lived, so long as I had one righteous neighbour I should have to contend with the whole crushing weight of public opinion. My own family, to be sure, I might occasionally convince by tremendous and spectacular bursts of work late at night; but unless every casual caller, every chance tradesman, every distant cousin of my wife's, who might come to our door at nine o'clock in the morning,

Condensed from Harper's Magazine

could invariably find me up and rubbing my hands briskly, I knew that the word would immediately get around, "Poor Mrs. Curtiss! Look at her slaving her fingers to the bone while that lout of a husband lies in bed half the day!"

The origin of the popular belief that the hours just after daybreak are somehow sacred and much more noble than any other hours of the day is easy to understand. Like many other obsolete creeds, its beginnings were pastoral and agrarian. The sun rises and ripens the grain; therefore we must also rise and get in the harvest. The beasts of the field are astir and mooing with the first rays of dawn; therefore man must do likewise.

As a matter of fact, most of this is today utter nonsense, as must be apparent to anyone who has spent three days on a modern farm. Early civilizations were forced to utilize all the daylight hours simply because of slow, primitive methods and the lighting problem. Under modern conditions there is no reason whatever why a successful farm could not be run on the same hours as a night club—if one had the whim—and some chicken farmers are doing it. In actual practice the very early hours are the poorest of the day for most farm work, as anyone can discover by trying to mow a lawn while the grass is still wet.

Domestic animals stir about and moo shortly after daylight for the same reason that I do, myself—because human tyrants have taught them that they won't get breakfast at any other time. Left to themselves, animals keep no hours at all. They eat when they are hungry and sleep when they please. I have seen horses lying sound asleep in the field long after daylight and heard the same horses munching the grass at midnight.

I once knew a crippled farmer who milked his cows at half-past nine every morning without the least harm, and a herd of Holsteins which was fed and milked regularly at noon and midnight would come to the bars at precisely those hours in complete defiance of the poets and the moralists. Going closer to the teachings of nature, we find that the hours of the average wild creature are just about those of a boulevardier.

Human beings, on the contrary, having once been caught in a vicious system, cast about to find pious reasons for their own feeble slavery. The favourite one is contained in the familiar saying that "the brain is clearer and the body is more alert in the early morning." But are they? Medical science has always taught that vitality is at its lowest ebb just before daybreak, and I myself do not believe that either brain or body gets into its true stride until well after noon.

Consider, for example, the special professions which are traditionally associated with night work—such

as morning journalism or the theatre. Can any such *esprit de corps*, such enthusiasm and endurance, such hearty joy in the work for its own sake be found in any of the daylight professions? Where do all the riotous, sparkling stories of newspaper life, the glorious legends of journalism arise? Among the afternoon papers, where the reporters go grudgingly to work at eight in the morning and sneak off at three? They certainly do not. They are invariably found among the morning papers where men and women go to work in the afternoon and willingly stay as late at night as anyone wants them. In the theatre a spirited matinée would be impossible, both for actors and audience, if the house were not deliberately darkened to simulate nightfall.

The plain fact is that a normal mind grows keener and clearer with each hour that the day advances—unless it has been cruelly driven and abused at those early hours when it should have been slowly finding itself.

The same, I sincerely believe, is true of the body. Can you imagine, for instance, a football match just after breakfast—or a prizefight at 6.30 a.m.?

Let the reader consider in his own case some occasion on which, with a group of fellow workers, he has gone back to the office to carry some press of work far into the night. Did not the task move with a speed and spirit that were quite amazing? And for once did not the dingy old office seem a friendly, fascinating place? When a man comes home and boasts, "Well, we worked until midnight, but at last we got it!" he believes that what has accomplished results has been the mere brute accumulation of hours. What has actually happened has been that under the cosy concentration of artificial light and the day's natural maturity the minds of those present have at last begun to function and have accomplished in a few hours what had seemed a hopeless puzzle during the dawdling, green periods of the day.

When do all the great deliberative bodies of the world meet to settle affairs of international moment? None of them before 11 o'clock and most of them much later. The most successful of them—the House of Commons—seldom convenes before teatime and usually not until evening. Why does the Stock Exchange open at 9.30 a.m. if minds are so much more efficient at seven?

I myself continue to get up as early as ever, but I still despise the practice. I am still convinced that all activity before noon is a disgusting and unnecessary imposition on civilized man. If every office, shop, factory and school were closed until noon, in two weeks the world would find itself inhabited by the happiest, healthiest, most reasonable population since the invention of the alarm clock.

LATIN AMERICA TURNS TO FAMILY PLANNING

Strategic moves against the twin evils of criminal abortion and a runaway birth rate

By Albert Q. Maisel

Late in the evening, in a dark alley of a Santiago, Chile, slum, a woman with a black shawl over her head knocks furtively at the door of a midwife's shack. She is only 28, but she looks twice that. She has already borne eight children, and now, in desperation, she is seeking an abortion to avoid adding a ninth to the brood that she and her husband can barely support on his wage of Rs. 85 a month.

Such abortions are illegal in Chile, as they are throughout Latin America. Until recently, however, they have been the only method of family limitation available to any except the wealthy, and they have been growing ever more common among the poor. In 1937, Chile's hospitals admitted nearly 13,000 women for treatment of the massive haemorrhages, infections and internal injuries brought on by illegal abortions. By 1961, the number of such admissions had reached 54,000.

Moreover, a survey made that year in Santiago indicated that fewer than half the women who undergo such operations attend a hospital for post-abortion treatment. Leading epidemiologists estimate that between 125,000 and 150,000 criminal abortions were being performed in Chile annually. Even more shocking, a study of maternal mortality records by Dr. Onofre Avendaño, professor of obstetrics at the medical school of the University of Chile, showed that, during 1961, two out of every five deaths among

pregnant women resulted directly from criminal abortions.

So alarming were these figures that, in May 1962, Chile's Public Health Service appointed an official National Committee for the Protection of the Family to work for the prevention of criminal abortion and to develop family-planning services. Guided by outstanding medical and public-health leaders, the movement has been making amazing progress. In the last two years, contraceptive clinics have been opened in six hospitals in Santiago alone. Others were operating in Concepción, Antofagasta and the Regional Hospital of Temuco.

These clinics have met virtually no opposition from the Roman Catholic Church in Chile. Catholic doctors have participated actively in sponsoring the work of the committee and in setting up and operating the new anti-abortion clinics. In the public-hospital clinics, all the scientific methods of birth control are taught—including the Catholic-approved rhythm method—so that each patient may space her pregnancies by means best suited to her health needs *and* her religious beliefs.

To most of Chile's public-health workers and medical men, the new contraceptive clinics represent a long step towards the solution of a moral dilemma. Now, as Professor Avendaño says, "we can offer women who decide to limit their fertility an adequate, innocuous procedure as an alternative to disastrous criminal abortion."

The growth of the clinics may also have an important economic effect. Between 1957 and 1962, for example, Chile's gross national product increased by about 15 per cent. But, during the same five-year period, its high birth rate—34·5 per 1,000 annually—brought about a population increase of 900,000, or more than 12 per cent. As a result, the average increase in *per-capita* income was less than Rs. 25 a year. For tens of thousands of poor families, with two, three or four additional children to feed and clothe, the standard of living actually suffered a drastic decline.

If Chile could lower its birth rate, pregnant women in Santiago's maternity hospitals would no longer have to lie two in a bed, as they now often must. The small earnings of the poor would no longer have to be shared among explosively growing families. Instead, an increasing portion of the growing national income could be devoted to replacing shacks with decent homes, to education and teacher-training, and to investment in industry that would produce a more rapid rise in the standard of living.

Chile is by no means the only Latin-American country that has made a vigorous start in the fight against the twin evils of criminal abortion and a runaway birth rate. In at least seven other nations of South and Central America, active

associations for family protection have been formed. And five of these countries now have family-planning services where the poor can learn methods of birth-spacing and family limitation.

In Mexico City in the summer of 1958, Dr. Enrique Beltrán called a meeting of 75 doctors, economists, lawyers, educators and political and labour leaders who had expressed concern over their country's soaring birth rate. Within four months, this group had formed the Mexican Association for the Welfare of the Family, and had established a small clinic near one of the city's major hospitals.

The clinic started with fewer than a dozen patients. But the news of its existence spread, and its list of patients increased to hundreds. Today, under the presidency of Dr. Arturo Aldama, the association has served more than 7,000 patients through three clinics in Mexico City, and is planning to open others as soon as they can be staffed.

Meanwhile, in the growing industrial city of Chihuahua to the north, a clinic has been opened in the largest hospital, the Sanatorio Palmore. These clinics are, of course, far too few to have achieved any notable reduction in Mexico's birth rate of 45 per 1,000.

In the six nations of Central America, birth rates range from 40·8 per 1,000 in Nicaragua to a fantastically high 49·9 per 1,000 in Guatemala. The population growth of four of them—Costa Rica, El Salvador, Honduras and Nicaragua—has actually outpaced the increase in their national product. Even in Guatemala and Panama, where national incomes rose, the standard of living of the poor with growing families declined markedly.

The real meaning of these statistics can be appreciated only when they are translated into human terms. In the capital of Honduras, women too poor to purchase a blanket have to leave the maternity hospital with their babies wrapped in old newspapers. Because of sheer malnutrition of both mothers and their babies, the infant mortality rate in Guatemala is the highest in the world. Nicaragua has been unable to provide even primary schooling for nearly two-thirds of its child population. Thus, the price of uncontrolled fertility in most of Central America is poverty, illiteracy, hunger, disease and early death.

Now, fortunately, a start has been made towards eliminating the basic cause of these tragic conditions. At the Ninth Central American Medical Congress in the winter of 1961, the 600 delegates—nearly all Catholic doctors—passed a resolution strongly urging all the Central American governments to include contraceptive services in their public-health programmes.

First to open a family-planning service in Central America was Honduras, where the Hospital San Felipe—largest in the country—

allows the service to use its maternity and prenatal clinic facilities. Besides working with patients, the staff is now training medical students, graduate doctors, nurses and social workers in all contraceptive techniques.

Because of its vast oil and iron-ore exports, Venezuela has the highest *per-capita* income in all Latin America. But with a birth rate of 44·4 per 1,000, its population growth has long outraced its national income. In 1962 the annual income of the average Venezuelan was Rs. 120 less than it had been five years earlier.

Among the hundreds of thousands of poor who have flocked hopefully to the capital, Caracas, abortions—performed under incredibly filthy conditions—have increased tremendously. At the Concepción Palacios, the municipal maternity hospital, 90 women are admitted every day to give birth. But, each day, 35 others are admitted for emergency treatment of the injuries and infections resulting from abortions.

Since last June a family-planning service, headed by the outstanding gynaecologist Dr. Darío Merchan Lopez, has been in operation at the Concepción Palacios. Here all who seek help receive not only contraceptive advice in accord with their medical needs and religious convictions, but complete uterine-cancer and blood tests, and periodic follow-up examinations.

Uruguay has an abortion rate said to be three times higher than the birth rate. Here again, doctors and other leading citizens have acted to give the poor a means of reducing the toll of illegal abortions. In 1962, Uruguay's first clinic to provide birth-control, infertility, and uterine-cancer-detection services was established at the Pereira Rossell Hospital in Montevideo, under the direction of Dr. Hermógenes Alvarez, professor of obstetrics at the medical school of the National University of Uruguay.

Brazil, South America's largest country, has experienced the continent's most rapid industrialization and economic growth for more than a decade. But in 1963, with the economy stagnating under massive inflation, population growth outpaced production, and *per-capita* income fell.

In the fetid *favelas* (shanty slums) that have sprung up around Rio de Janeiro and São Paulo, notes Leticia Borges Costa, "some families living on Rs. 95 a month have from ten to 15 children, not counting those who died in their early years. Apparently the incidence of abortion is very high; we all know of midwives who perform ten or more abortions a day."

To help provide an alternative, leading citizens of São Paulo organized a Service of Family Orientation under the presidency of Mrs. Borges Costa. Today, it operates Brazil's first clinic offering marriage guidance, family-planning advice,

and infertility and birth-spacing services.

Like Brazil, the Argentine has been in the grip of economic stagnation, with a declining national production, rapid population growth and a consequent drop in *per-capita* income. In the crowded slums surrounding Buenos Aires, abortion runs rampant. One out of every six patients in the maternity ward of the Ciudadela Hospital in 1962, for example, was admitted not for childbirth but for treatment of injuries or infections caused by illegal abortion.

As yet, the Argentine has not established any child-spacing clinics. But there has been open discussion in the Press of the problems posed by the country's fast-growing population. Significantly, many of the most liberal statements regarding family limitation have come from distinguished members of the Catholic clergy. Thus, in the magazine *Primera Plana,* Jesuit Father Fernando Storni declared, "I don't know why the idea that Catholics should have as many children as God might send them has been spread among Argentine doctors. The fundamental truth is: a couple should not procreate more children than they can provide for effectively."

Obviously, a total of 18 clinics operating in only eight of Latin America's 20 countries cannot reverse the tide of population growth that is, in so many areas, perpetuating—and even intensifying—the most abject poverty. But what is significant is the rapidity with which these family-protection associations and their clinical services have been developing. Even more significant is the fact that the drive for family planning in each of these countries is an essentially indigenous one, led by the most thoughtful, patriotic and outstanding citizens.

Passing Remarks

Half-way down a steep winding hill near Egton, North Yorkshire, we stopped our car to ask an old woman at her gate if the hill was dangerous. "Not 'ere it isn't," she told us. "It's down at bottom where they all kills theirselves."

—Florence Hopper in *The Countryman*

In front of a grocer's shop in a small seaside resort, two elderly ladies stopped to pass the time of day. "What's this I hear about somebody dropping dead up your way?" asked one.

"Yes, happened right outside my house," replied the other. "A good bit of excitement for a while, but it wasn't as bad as we thought. Just one of the summer visitors."

—F. C.

Inexhaustible Riches From the Sea



"Open Sea," by Frederick Waugh

The new science of oceanography is revealing exciting prospects for making the wealth of the oceans available to man

By George Boehm

Men of vision have long recognized that a great untapped storehouse of natural wealth lies in and beneath the waters that cover 70 per cent of the earth. But only recently has a concerted effort begun to exploit these resources. There is a world-wide surge of scientific interest in understanding the oceans and finding new ways to recover from them a vast abundance of food and minerals. Much has been accomplished within the last ten years. Marine fishermen have doubled their annual catch. Oil, gas and sulphur have been pumped in steadily swelling torrents from the

Condensed from Fortune

sea floor. Engineers have been devising equipment to mine the inexhaustible supply of metals from deposits on the ocean bottom.

The science of oceanography is still relatively young. The bottom of the oceans is in most areas no better mapped than was the African continent in the last century. Nearly four years ago, for example, a survey ship, on her way from the Panama Canal to Key West, discovered a 6,000-foot mountain rising from the bottom of the sea to within 90 feet of the surface—its existence had never before been suspected. Biologists still know little about the breeding and migratory habits of most fish.

But if the current burst of interest is any indication, many gaps in knowledge and technique are sure to be filled within the next few decades. Virtually all the leading maritime nations—notably Britain, the U.S.S.R., Japan, Germany and the United States—are expanding their research programmes. Significantly, the growing store of knowledge will be brought fully to bear years hence when the world's population will have doubled and many mineral resources on land will have been depleted by a voracious technology.

The Age of "Aquaculture." A deeper understanding of marine resources will basically alter man's attitude towards the ocean. Up to now man has used it as a nomad uses the grassland or a primitive hunter the forest. The new attitude, labelled "aquaculture," implies cultivating and managing the resources of the sea in the way modern farmers and foresters husband the resources of the land. Rather than simply gathering the fruits of the water, man will involve himself in the natural processes that create resources and will do his best to regulate them to his advantage.

The aquacultural approach has led scientists to speculate about ways to herd fish, increase the stock, build up the productivity of the water. The most promising places for aquaculture are bays and estuaries, where the waters are easily accessible from land. Perhaps the most impressively productive of such enterprises today is mussel culturing in Italy's Gulf of Taranto, where the annual yield averages 108,000 pounds of meat an acre.

There are also opportunities for aquaculture in the shallow water on the continental shelves, which, added together, have an area equal to that of all Asia. Scientists will have to understand this environment as intimately as an Eskimo understands his world of ice and snow. One pioneer is already at work: the French oceanographer Jacques-Yves Cousteau has been colonizing the ocean floor. In 1963, seven of his associates lived in cylindrical steel huts resting on the bottom of the Red Sea. Five of them spent a month at a depth of 50 feet; two spent more than a week at 80 feet. Supplied with a flow of air

from the surface, all worked a six-hour day that included hard physical labour. Cousteau believes that men can live in such colonies at the limits of the continental shelf, as far down as 600 feet.

The Pyramid of Life. The ocean is an inexhaustible, self-replenishing storehouse of most of the basic materials that a modern economy needs. Dissolved or suspended in the water or lying on the ocean floor are countless tons of all the natural chemical elements; the production of plant matter equals the growth on all the croplands, meadows and forests, and the community of animals easily outweighs all the creatures who live on the land.

The basis of life in the ocean is a thin soup of tiny plants and animals, collectively known as plankton, which inhabit the sunlit upper layers of water. They are the foundation of a living pyramid. That is to say, they are the staple food of small fish which, in turn, are eaten by larger fish.

It might be possible to stimulate the growth of plankton in certain locations—a procedure somewhat analogous to fertilizing a pasture. Oceanographers are investigating schemes for stirring up parts of the ocean to bring to the surface nutrients that make plankton flourish. One approach is to install a vertical pipe that would raise water from lower levels through a physical process that depends on slight temperature and salinity differences. Another suggestion is to set a large heat source—perhaps an atomic pile—on the bottom to start vertical convection currents. Such ideas, not economically feasible at present, may one day prove important.

Mineral Wealth. The fact that seawater itself is rich in minerals has inspired proposals to "mine" it by chemical processing. Common salt has been produced by evaporation for centuries, and in recent times potash has also been recovered. Since 1924 the Ethyl Corporation has been extracting bromine, and since 1941 the Dow Chemical Company has supplied the United States with magnesium made from seawater. One day it may pay to get rubidium, caesium, sulphur, boron, strontium and fluorine from the ocean.

Oceanographers have long been aware that the bottom of the sea contains ore deposits comparable to those on land. In the early 1870's, the British oceanographic vessel *Challenger* dredged up from the bottom of the ocean lumps of a strange mineral that looked like fire-blackened potatoes. These nodules were found to be exceptionally rich in manganese and contained substantial amounts of other metals —chiefly iron, copper, cobalt and nickel.

During the recent International Geophysical Year, dredging in deep waters revealed that much of the ocean floor is literally cobbled with nodules. Individual nodules grow in

layers like onions and at an incredibly slow rate, generally no faster than one millimetre in a thousand years. Yet, as worldwide surveys have shown, there are so many nodules forming all the time that they could supply all man's needs for their major metallic constituents, and still the total growth would easily exceed the rate of depletion.

Several companies are now investigating ways of dredging and refining these nodules. Engineer John Mero, consultant to Newport News Shipbuilding & Dry Dock Company in America, has stated that the best way to mine nodules is to suck them off the bottom with a sort of hydraulic vacuum cleaner.

An entirely different kind of nodule, rich in phosphate rather than metals, also promises to be worth mining. Phosphorite nodules on Forty Mile Bank, west of San Diego, California, are very nearly comparable to high-grade phosphates mined on land. Surveys indicate that this reserve may be about 1,000 million tons.

Most nodules are found in deep water, but submarine prospectors have discovered other mineral deposits in extremely shallow water. Rich tin ores lie off the coasts of Thailand and Indonesia. Gold occurs in sands and gravels near Nome, Alaska. Sam Collins, a 50-year-old oil-drilling and pipeline contractor, has struck it rich in a brand-new mining business: scooping diamonds from the floor of the ocean. With financial backing from the De Beers organization and other mining companies, Collins is averaging almost Rs. 10 lakhs' worth of diamonds a month dredging gravel in shallow water off the coast of South-West Africa.

Fish Forecasting. Some species of today's commercially valuable fish are in danger of depletion, while worthless fish threaten to take over the ocean. Because of this danger, a number of the world's fisheries are coming under management spearheaded by some 200 experts: marine scientists from universities and government, representatives of industry and "fishery diplomats." They circulate among a number of international agencies that keep track of the population of certain fish in specified areas and then recommend regulations as to the quantity of fish the participating countries should catch.

The key concept in fishery management is "maximum sustained yield"—the rate of exploitation that the resource can tolerate without diminishing. This kind of conservation calls for carefully regulated harvesting, rather than hoarding. Foresters know now that periodic thinning out improves a stand of trees; similarly, a fish population may be all the healthier if it is reduced so that the survivors have plenty of food.

Biologists have already had considerable success in predicting fish populations. The U.S. Bureau of

Commercial Fisheries at Woods Hole, Massachusetts, for example, makes reliable forecasts of the abundance of haddock and other ground fish so that fishermen and processors can plan their operations a year in advance. The bureau has also been able to correlate the appearance of certain types of fish in mid-Pacific with water temperatures measured off Hawaii.

The peculiar habit shared by salmon and a few other marine fish of returning to spawn in the very streams where they were hatched suggests that it may be possible to improve fish genetically like any domestic animal. Lauren Donaldson of the University of Washington is doing just that with Chinook salmon. Since 1949 he has been selecting his breeding stock with an eye towards several factors that make for desirable fish. His goal is a fish that matures early, lays a lot of eggs, has healthy offspring, resists disease and has a hefty, meaty body.

Far-sighted oceanographers continue to seek ways to locate and exploit new resources beneath the waters. Many feel that it is far more urgent for man to become familiar with his own planet than it is to explore the moon.



Fighting for Fighting's Sake

DURING THE WAR with the Maoris, a Maori chieftain noticed one day that the English firing decreased considerably; he dispatched a messenger carrying a white flag to the English line to enquire why they were so slow. The Commander told the truth: "We are running out of ammunition." When the Maori chieftain learned of this deplorable situation, he sent his messenger back to the English with the information that they might borrow some ammunition from him so that the fighting might be resumed along the old lines. —Sir Alfred Pickford

* * *

Please Do Not Touch

A FRIEND of mine was visiting a country house which is open to the public. By good fortune, a member of the family conducted my friend through rooms of beautiful furniture pointing out various *objets d'art* which, instead of being locked in glass cases, were openly displayed. Absentmindedly, my friend picked up a small vase to study it. She was horrified when it slipped from her fingers and crashed to the floor, smashed beyond repair. "Think nothing of it, my dear," said her guide reassuringly—and passed out. —Mrs. W. Z.

Midsummer Night in Finland

By Art Buchwald

Rovaniemi, Finland. We were invited here to celebrate an ancient rite, the Midsummer Night Festival. The Finns light bonfires, make wishes, renew friendships, commune with spirits. Much folklore is involved, and wonderful things can happen.

If you collect nine kinds of flowers and put them under your pillow you will see your beloved's face in a dream. If you look through a ring held up to the midnight sun you will also see your beloved. If you look in a well you will see the reflection of your loved one. And if a girl walks through a wheat field at midnight with no clothes on, later on when bread is made from the wheat the boy who eats the bread must fall in love with her.

Unfortunately we had to leave our wife in Paris, so the first thing we did was to search for nine kinds of flowers so that we could dream of her. Then we joined some Finnish friends and started the serious part of the celebration, which consisted of holding a bottle to our lips and tipping it upward towards the sun.

Finally we settled down with the flowers under our head. Sure enough, we saw a vision of our beloved. Her hair was in curlers.

"Hallo, beloved," we said.

"Don't 'hallo beloved' me," she said angrily.

"Now don't get angry," we said. "I looked high and low for nine kinds of flowers so I could talk to you."

"Why don't you use the telephone like other husbands do?"

"Well, this way is cheaper and, besides, it's more romantic."

"There's nothing romantic about me being in Paris and you in Finland," she said and disappeared.

We woke up, and only 300 yards away we saw a well. We rushed over to it and looked down—and there she was! "We were cut off," we told her. "Listen, beloved. As soon as my work is done I'll rush back to you and the children."

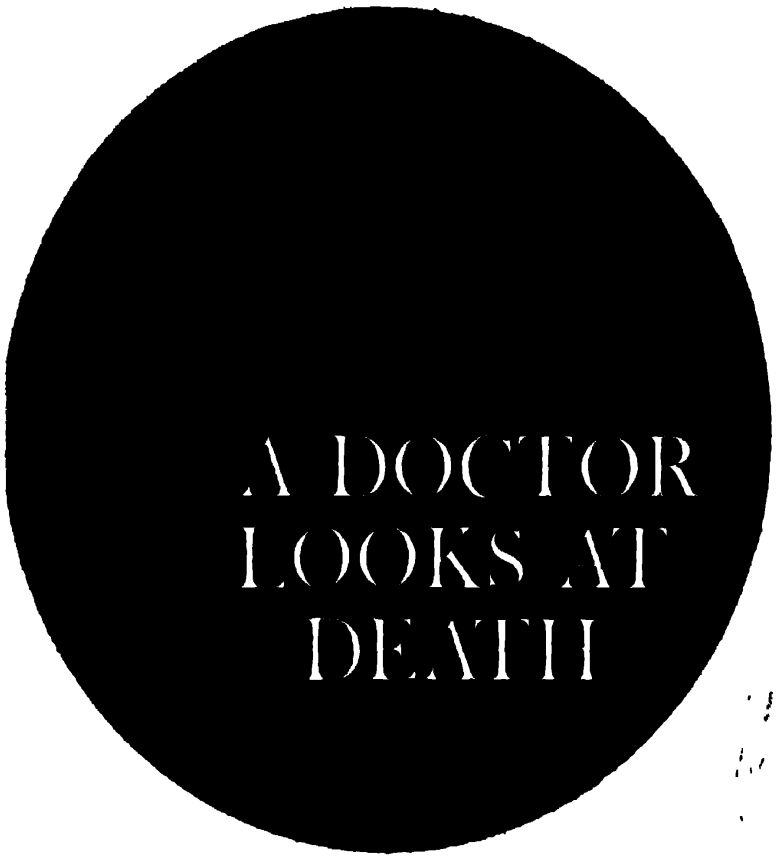
"A likely story." She disappeared.

We took off our wedding ring and held it up to the sun. This time she was more than peeved. "Why don't you go back to your party and forget about me?" she said.

"I just wanted to tell you how dreary it is without you," we said.

"Tell it to the reindeer," she retorted. "And one more thing. I don't care if you pick their flowers and drink their booze—just don't eat their bread!"

Condensed from New York Herald Tribune



By Dr. Félix Martí-Ibáñez

Death is no stranger to me. As a doctor, I have often seen men dying, and I have often seen men dead. Still, the drama of death never ceases to be grievous and disquieting.

Philosophically, death is an enigma. The physiologist Rudolf Ehrenberg stated that it is impossible to define life without death. Up to its very last link, life is a biochemical chain reaction. Once life is launched, like a bullet it must reach its final destination, which is death.

Death is less frightening, however, when we concede that life attains maximum fullness only when it is guided by an ideal, by something for which we are willing to die if necessary. Whatever incites us to die also incites us to live with greater intensity. That is why the lives of heroes, mystics and martyrs are more intense than the life of an ordinary mortal. That is also why love and the pleasures of the senses are felt more intensely by people who are facing death in a war or revolution. I remember that during the Spanish Civil War, for those of us who were living in the expectation of dying at any moment, everything—a day of sunshine, the clasp of a hand, a glass of wine, a pretty

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face, a bird, a rose—acquired a sublime and unexpected value.

A noble example of a serene attitude towards death is to be found in the last letters that Dr. Edward Wilson, physician, naturalist, artist and Antarctic explorer, wrote to his wife from the icy wastes of the South Pole. The men in Scott's ill-fated expedition, of which Dr. Wilson was a member, were starving, had no fuel with which to keep warm. Dr. Wilson's letters were found near his ice-sheathed body. "Don't be unhappy," he wrote. "We are playing a good part in a great scheme arranged by God himself . . . We will all meet after death, and death has no terrors . . . All is for the best to those that love God . . . All is well."

Death is an essential attribute of life, and life should never become a hospital or a clinic in which we dare not live for fear of death. Fear of death is a necessary concomitant of our existence, but we must not allow it to influence that existence. The essential thing is to know how to live.

The man who *loves* life lives a fuller and better life because he has put death in its proper place. Of course, life can sometimes be prolonged by not using it, just as money will last longer if it is not spent, but such a soporific extension is obtained only by sacrificing all intensity in living, thereby turning life into mere hibernation.

What are the roots of the fear of death? First of all, fear of pain and of the feeling of anguish that is implicit in dying. Second, the sadness of leaving our loved ones and all those things—work, joys—that bind us to the world. Third, and perhaps most important, fear of the unknown.

Contrary to popular opinion, death (apart from exceptional cases or accidents) is not accompanied by physical pain. Rather, it is suffused with serenity, even a certain well-being and spiritual exaltation, caused by the anaesthetic action of carbon dioxide on the central nervous system. "The pang of death, a famous doctor once told me, is often less than that of a toothache," wrote Ernest Hemingway.

Everything known to medicine seems to show that the sensation of dying is like that of falling asleep. And if a person accepts his death as an act of service to an ideal, or as the end of his life's work, it could be a blessing. It could be accepted more willingly if we knew that we had fulfilled our duty in life.

Furthermore, abandoning our worldly goods and our loved ones would be less distressing if we knew we were leaving behind a legacy of love, creation, goodness, justice and ideals. "Let us be poets of our existence," said the philosopher Ortega y Gasset, "by knowing how to find for life the exact rhyme of an inspired death."

But the great fear is that of the unknown, similar to the childhood

fear of darkness. Does our protoplasm simply dissolve into its primordial elements and return to the universe, or does the complex system of images that we call consciousness survive? Carl Gustav Jung said, "The decisive question for man is: Is he related to something infinite or not? Only if we know that the thing which truly matters is the infinite can we avoid fixing our interest upon futilities, and upon all kinds of goals which are not of real importance."

It might help to dissipate our fear if we remember that, were we endowed with consciousness before birth, we would probably feel the same fear of the unknown when passing from the shadow-world of the womb, all peace, silence and darkness, into the light-world of life, all noise, commotion and cold. We ought to know how to leap into the unknown world of death just as we do into life at birth, particularly since when we die we have the advantage of having lived, of having a treasury of memories—of tasks completed, of tenderness and affection, of having fulfilled a duty with love and generosity.

We cultivate the will to live, but unfortunately we do not try to cultivate the will to die properly. We desire death only in moments of utter desperation or intense happiness. Were we to deem it a physiologic necessity like hunger or thirst, we would aspire to die, as Nietzsche said, "like a torch which dies exhausted and glutted with itself."

There are millions of people whose philosophy and religion have taught them how to die when the time comes. Thus, just as they love life, they know how to love death.

The gentle Rabindranath Tagore once said, "It is the same life that shoots in joy through the dust of the earth in numberless blades of grass and breaks into tumultuous waves of leaves and flowers. It is the same life that is rocked in the ocean-cradle of birth and of death, in ebb and flow. Because I love this life, I know I shall love death as well."

To attain this philosophic attitude, we must cultivate the idea of dying with wisdom and dignity as a fine end to a fine life. Even as a coin attains its full value when it is spent, so life attains its supreme value when one knows how to forfeit it with grace when the time comes.

Focal Point

Soon after getting his first pair of bifocals, a friend on a local newspaper typed us this note:

I think I'm getting used to my new bifocals:

—H. H.



Born in Surrey, England, and educated at Oxford, David Ogilvy began his business career as a chef in a Paris hotel, later sold stoves in Scotland and, during the last war, served as Second Secretary of the British Embassy in Washington. He is now chairman of the New York advertising agency that he founded: Ogilvy, Benson & Mather, Inc.

Should We Abolish Advertising?

By David Ogilvy

An eminent practitioner examines the major criticisms levelled at his profession

Not long ago, my elder sister invited me to agree with her that advertising should be abolished. I found it difficult to deal with this menacing suggestion. First, I am neither an economist nor a philosopher. Second, advertising provides my bread and butter. I was able at least, however, to point out to my sister that opinion is divided on the question.

The late Aneurin Bevan is said to have thought that advertising was "an evil service." Arnold Toynbee, the historian, "cannot think of any circumstances in which advertising would not be an evil." Professor

J. K. Galbraith, author of *The Affluent Society,* holds that advertising tempts people to squander money on "unneeded" possessions when they ought to be spending it on public works.

Franklin Roosevelt, however, saw advertising in a different light: "The general raising of the standards of modern civilization among all groups of people during the past half century would have been impossible without the spreading of the knowledge of higher standards by means of advertising."

Sir Winston Churchill agrees: "Advertising nourishes the consuming power of men. It sets up before a man the goal of a better home, better clothing, better food for himself and his family. It spurs individual exertion and greater production."

To hold that "combative"—or "persuasive"—advertising is economic waste has become orthodox doctrine. Author-economist Stuart Chase, for example, says that "advertising makes people stop buying Mogg's soap and start buying Bogg's soap. Nine-tenths of advertising is largely competitive wrangling as to the relative merits of two undistinguished and often undistinguishable compounds." But most serious economists agree that advertising serves a useful purpose when it is used to give information about new products.

My own experience suggests that this kind of informative factual advertising is more effective in terms of sales results than the combative, or persuasive, advertising. Furthermore, it is relatively easy to persuade consumers to try a new product. But they grow maddeningly deaf to the advertising of products that have been around for a long time. Thus, since we advertising agents get more mileage out of advertising new products than old ones, academic virtue and commercial self-interest march together.

Meanwhile, certain questions do get raised and broadsides fired.

Does advertising increase prices? Professor Neil Borden of Harvard, with an advisory committee of five other professors, examined hundreds of case histories to discover the effect of advertising on prices. Among his conclusions: "The building of the market by means of advertising and other promotional devices not only makes price reductions possible for large firms; it also creates an opportunity to develop private brands, which generally are offered at lower prices." Professor Borden and his advisers decided that advertising, "though certainly not free from criticism, is an economic asset and not a liability."

Says Lord Heyworth, the former head of Unilever: "Advertising speeds up the turnover of stock, and thus makes lower retail margins possible without reducing the shopkeeper's income. On the manufacturing side, it is one of the factors that make large-scale production possible—and who would deny that

large-scale production leads to lower costs?" In most industries, the cost of advertising represents less than three per cent of the retail price that consumers pay.

Can advertising foist an inferior product on the consumer? Bitter experience has taught me that it cannot. On those rare occasions when I have advertised products that consumer tests found inferior to other products in the same field, the results have been disastrous. An advertisement can persuade consumers to buy an inferior product—*but only once*. And most of my clients depend on repeat purchases for their profit. Howard Morgens, president of Procter and Gamble, and Alfred Politz, founder of a market- and opinion-research organization, believe that advertising can actually accelerate the demise of an inferior product. Says Morgens, "The quickest way to kill a brand of poor quality is to promote it aggressively. People find out about its poor quality just that much more quickly."

He also points out that advertising plays a significant part in product improvement: "Research is constantly seeking ways to improve the things we buy. But many suggestions for improvement come from the advertising end of the business, because the success of a company's advertising is closely tied up with the success of its product development. The direct beneficiary is the consumer, who enjoys an ever-widening selection of better products."

Advertising is also a force for *sustaining* standards of quality and service. According to the late Sir Frederic Hooper, former managing director of Schweppes, "A firm which has spent a substantial sum advocating the merits of a product, and accustoming the consumer to expect a high and uniform standard, dares not later reduce the quality of its goods."

Much advertising is a vulgar bore. C. A. R. Crosland thunders in the *New Statesman* that advertising "is often vulgar, strident and offensive. And it induces a cynicism and corruption in both practitioners and audience owing to the constant intermingling of truth and lies."

This, I think, is now the gravamen of the charge against advertising. Ludwig von Mises, Austrian economist, describes advertising as "shrill, noisy, coarse, puffing." He blames the public for not reacting to dignified advertising; I am more inclined to blame the advertisers and the agencies—including myself.

I am particularly offended by tasteless typography, banal photographs, clumsy copy and cheap jingles. It is easy to skip these horrors when they appear in magazines and newspapers, but it is impossible to escape them on television.

Raymond Rubicam's identification of a great advertisement was that "its public is not only strongly sold by it, but both the public and

the advertising world remember it for a long time as *an admirable piece of work*." My own definition is that a good advertisement is one which sells the product *without drawing attention to itself*. The reader, instead of saying, "What a clever advertisement!" says, "I never knew *that* before. I must try this product."

If advertisers would give up flatulent puffery and turn to factual, informative advertising, not only would they increase their sales, but they would put themselves on the side of the angels.

The majority of thought-leaders now believe that advertising promotes values that are too materialistic. The danger to my bread and butter arises out of the fact that what thought-leaders think today, the majority of voters are likely to think tomorrow. No, I do not believe that advertising should be abolished. But it must be reformed.

Small Slam

THE SECRETARY of a bridge club sent this message to a member in the hospital: "The card committee has voted 7 to 5 to wish you a speedy recovery." --A M.

* * *

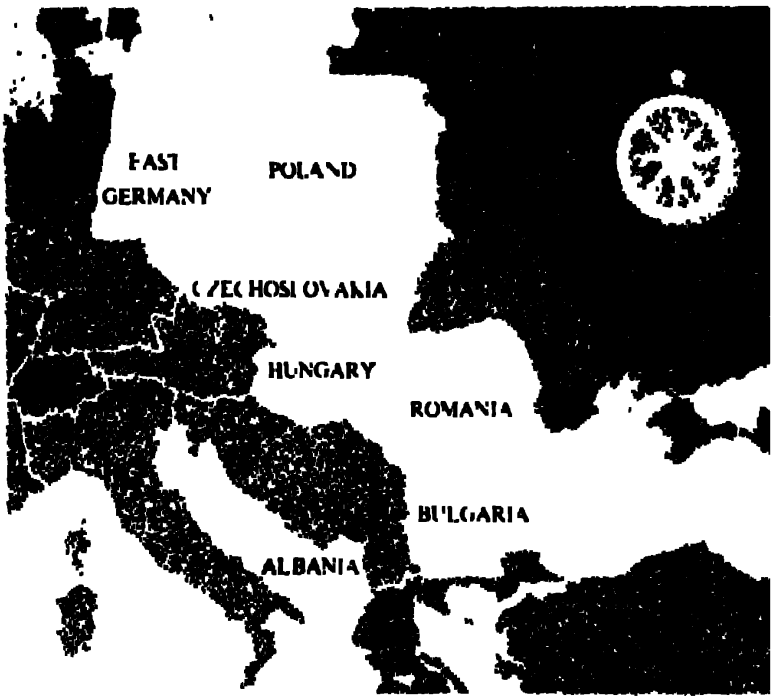
The Coming of Old Age

ONE night I was sitting by the fire with friends, listening to the older members reminiscing. One old fellow kept forgetting his place in his story. He'd start from the beginning, only to forget again. Getting a bit flustered, he leaned towards me and said, "Young lady, you'll have to excuse me. I've never been as old as this before." —Contributed by Flora Goff

OUR young family doctor has a patient in his late 80's, a retired naval officer who spent several weeks in hospital, growing testier and sicker by the day. In the end, he revolted. "If I'm going to die," he roared, "I'm going to die at home!" Whereupon he went home and settled down in a comfortable chair with a glass of whisky. Three weeks later he was still enjoying his whisky and feeling much better. When the doctor told us that he continued to see the old man daily, my wife said. "At the Commander's age he's entitled to some privileges. Please don't go telling him what to do."

The doctor looked at her in astonishment. "Who's telling?" he said. "I'm *asking*." —Contributed by K. K.

Behind the Iron Curtain: the Affluent Society



For 18 years, ever since Sir Winston Churchill coined the phrase "Iron Curtain," the West has looked upon Eastern Europe as one vast prison camp where 100 million people cower under communist oppression, quivering whenever Moscow cracks the whip. This image, once broadly true, is no longer so. Eastern Europe, like Russia itself, is changing. Slowly yet inexorably the "captive nations" are moving away from total dependence on Moscow towards new relationships with the West. Eldon Griffiths recently made a five-week tour of Eastern Europe, interviewing hundreds of people, carefully avoiding official tours. This is his report.

By Eldon Griffiths

THE "CAPTIVE nations" of Europe no longer consider themselves captives. The knock in the night is rare, the labour camps are closing down, the persecution of priests is gradually ending. Only a few months ago strikes were reported from Poland and Czechoslovakia against poor working conditions and pay cuts. In Czechoslovakia, the regime's own trade-union newspaper,

Condensed from Newsweek

Praca, printed strike details—the first time existence of any strike has been admitted.

East Germany is still a Russian puppet—and a police state, too. The rest of the Eastern European nations are subject to bullying by the Soviet Communist Party. Yet, in spite of Moscow's efforts to unite their armies in the Warsaw Pact, and their economies in COMECON (the communist equivalent of Western Europe's Common Market), each one is currently asserting its national independence. "The East Europeans are now *bourgeois* nationalists," says an experienced Western ambassador. Another diplomat adds, "There is no longer a communist monolith."

This is the major fact about Eastern Europe today—the time-worn clichés of the cold war are becoming irrelevant or obsolete. The Eastern European nations are groping towards a new social order and national independence. This new world is only half-formed, but clearly it will combine many features of communist economics with some manners and *mores* of Western democracy. Its main feature today is change—massive, unalterable change.

Industrial Revolution. From the Polish city of Poznan, where a frontier official offers the traveller a Pall Mall cigarette, to the Bulgarian port of Varna, where British tourists are taking cheap seaside holidays, Eastern Europe is on the move. In Slovakia, forests are being cut down to make way for chemical plants. There are more smokestacks than steeples in southern Poland. In Sofia, where the smell of the Balkans mingles with diesel fumes, an ancient mosque and church domes are silhouetted against new blocks of flats.

This change can be measured statistically: More than 20 million people have moved from the villages into the big towns in the last ten years. Eastern Europe produces nearly three times as much as it did before the war. Poland has overtaken France as Europe's third coal producer (115 million tons last year). Manufactures are replacing foodstuffs as the staples of Eastern European trade.

What industrialization has meant for the people of Eastern Europe can be seen at Kremikovtsi, a town ten miles outside Sofia. There, 37-year-old Stefan O., a tall, shaggy-haired engineer, took a visitor to the top of a cooling tower inside a huge new steel plant. "That is how I grew up," he said, waving his arm towards a dusty village. "There is no paved road in that place, no

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school, no hospital." Proudly, he gestured at the Kremikovtsi plant, which will soon start rolling steel. "Here we are building a new Bulgaria," he said.

Millions of Eastern Europeans have been forced—in a single generation—to leap from the late Middle Ages to the twentieth century. The process has been cruel, the cost in human suffering incalculable. Yet industrialization is inexorable—and in Eastern Europe it is benefiting more people than it hurts. Electric-power lines are bringing light where before there were only oil lamps. Tractors are taking over from ox-drawn ploughs; wooden clogs are giving way to leather shoes.

Most of all, industrialization is revolutionizing education. Before the war, only a fraction of young Bulgars learned to read and write; illiteracy was widespread in Poland and Romania. Today, nearly every child in Eastern Europe can go to school. The number of secondary students has quadrupled in the last ten years. Hungary has raised its school leaving age to 16 (compared with 14 in Italy, 15 in West Germany); Poland, where the last generation was 40-per-cent illiterate, has more university students among its 30 million people than Britain with a population of 53 million.

Squares and Hacks. Marx and Lenin assumed that industrialization and education inevitably would breed good communists. It hasn't turned out like that. After 20 years of communist control, most people in Eastern Europe are unconvinced. Too many have radios tuned to the West to swallow indiscriminately the Party propaganda. Too many have attended universities to accept without argument the slogans of *Das Kapital*. Everywhere, though there is no detectable desire to revolt, there is indifference. The most frequent response of young people asked what they think of the Communist Party is summed up in the Polish phrase, *"Nie Moja Sprawa"* —"I couldn't care less."

"The trouble with the Party," said a medical student in Sofia, "is that it isn't, how you say, 'with it.'" Grumbled a lawyer in a Prague café, "All the best jobs go to Party hacks." His girl friend blew derisively down her drinking straw. A Polish journalist used a bit of English slang: "Only the squares belong to the Party."

Among professional men and technicians, there is a widespread disillusionment with communism. Adam P., a middle-ranking official in a Polish ministry, said, "Before the war, I could go to Paris wearing a Polish-made suit and look any man in Europe in the face. But today I am ashamed. I am poor and badly dressed." Adam works a 70-hour week and earns 4,000 *zlotys* a month (Rs. 790)—high pay by Polish standards; yet his apartment has only two rooms, and he and his teacher-wife cannot afford a car. His pent-up bitterness burst out in a

tirade. "For 15 years I tried to be enthusiastic about socialism. I believed in the Revolution. But the more I see of communism, the less sense it makes."

The disillusionment of men like Adam P. worries communist leaders all over Eastern Europe. For these are the people—the technicians, the engineers, the conscientious professional men—on whom the success or failure of the communist experiment depends. The communists know that their ideology has failed to enlist these men in their cause. They have also discovered that attempts to terrorize such people often backfire.

That, more than anything else, is why Eastern Europe's governments have begun to liberalize. The process started, as it did in Russia, with the death of Stalin. One of its early public manifestations was the release from jail of Wladyslaw Gomulka of Poland early in 1956. Himself a victim of Stalinism (his crime: "national deviationism"), Gomulka won popularity by disguising his communism under a cloak of nationalism. After a showdown with Khrushchev, he sent Soviet "advisers" packing, "disciplined" the secret police, put an end to most collectivization (90 per cent of the land in Poland is now owned by peasant proprietors), and ordered sharp improvements in the supply of consumer goods. The most onerous restrictions were removed from the arts, and for the first time Western visitors were welcomed in a communist country.

None of Gomulka's reforms have changed the essential character of the communist state. Nevertheless, most Poles accept the fact that Gomulka's regime is more nationalist than communist, more pragmatic than doctrinaire.

"The Poles," says one Western envoy with experience of both Moscow and Warsaw, "no longer think of themselves as taking orders from Russia. They are convinced that their example is leading Khrushchev towards a new kind of communism, in close contact with the West."

Small Flags. The same kind of "national" and "European" communism is emerging in Hungary, too. There, de-Stalinization reached its peak with the revolt of 1956. At the time, Janos Kadar, who crushed the revolt with Soviet troops and ordered the execution of hundreds of young men found on the barricades, was portrayed as a monster. Kadar has since proved the most liberal communist ruler in Eastern Europe.

At the Budapest airport a senior official from the foreign Trade Ministry was on hand to greet a British businessman. On their drive into Budapest, a workman waved a flag to warn of road repairs.

The businessman remarked, "I see you still have red flags."

"Ah, yes," said the official, "but only little ones now."

That just about sums up contemporary Hungarian communism. The Party is in power—but it keeps well out of sight. Hungary has few restrictions on writers or painters; passports to travel abroad are issued with little difficulty. In 1962 more than 70,000 Hungarians took holidays in Western Europe. Cabarets are alive with political skits on the Sino-Soviet rift. The state television service (Hungary has 424,000 sets) runs a highly popular 15-minute feature entitled "This Does Not Please," which airs fierce criticisms of the authorities.

Romania and Bulgaria have proceeded much more hesitantly. One of the slowest to change has been Czechoslovakia, the most industrially advanced nation in Eastern Europe, under old-line Stalinist Antonin Novotny. Some Western experts believe Novotny will be "out" before long. When he goes, says one diplomat, "the tide of liberalization will sweep across the country."

If it does, this may mean the end of "old-fashioned" communism in Central Europe. For the Czechs, like the Poles and the Hungarians, are Western-oriented.

Open Door. This "Westernization" process is another of the great changes that are transforming Eastern Europe. Nearly a million Western Europeans a year are visiting the Eastern lands. From East Berlin to Plovdiv, trains, planes and hotels are sprinkled with British salesmen and German engineers. The businessman's "trade offensive" is tearing the Iron Curtain apart.

Britain's Imperial Chemical Industries is currently exporting more to communist Europe than to the United States. A Franco-British consortium is building a Rs. 19 crores steel mill for Romania. At an American motor show in Bucharest recently, thousands of Romanians broke down police barriers to see the latest models.

The attraction of the West is bolstered by the growing feeling that the Soviets have exploited Eastern Europe for too long. Asked why it is necessary to build a new steel plant in Bulgaria when the Soviet Union could supply all the metal needed, a Sofia engineer said, "We do not want to depend on *anybody* else." A COMECON proposal that Romania slow down its investments in heavy industry produced an explosion in Bucharest. Mihai Siobanu, chairman of the Romanian chamber of commerce, denounced Moscow for "failing to respect the rights, interests and sovereignty of individual countries."

Confronted by such complaints, the Russians are recognizing the need for compromise with Eastern Europe's nationalism. No longer do they talk of "crushing *bourgeois* separatism," the Stalinist term for national pride. "The ancient facts of history and geography are reasserting themselves," says one

long-time Western resident. "The communists are trying to rewrite Marxist-Leninism in terms of national pride."

Rift. The Sino-Soviet rift has speeded up this process. For Peking's version of communism, with its implications of a return to outright Stalinism, frightens Eastern Europeans much more than NATO does. Almost without exception, the communist leaders of Eastern Europe are eager for a "truce" in the cold war.

For the West, this is a change of vital significance. The chancelleries of Western Europe are filled with speculation about a possible Soviet troop withdrawal from Hungary (there are about 500,000 Soviet troops in Eastern Europe, less than the forces that the Western allies maintain in Western Europe).

It would be naive to imagine that the Eastern European nations can change in a moment of time, like Cinderella, into Western-style democracies. The proximity of the Soviet Union alone precludes that. But it is no longer correct to regard the Iron Curtain, except in Walter Ulbricht's East Germany, and Albania, allied with China, as anything more than a tattered piece of tinfoil. Fifteen years of communist control have overlaid Eastern Europe with a thick patina of Marxism—yet once you scratch the surface it soon becomes apparent that the people are like radishes—pink outside and white inside. They remain, at heart, incorrigibly Western.

A Step in the Right Direction

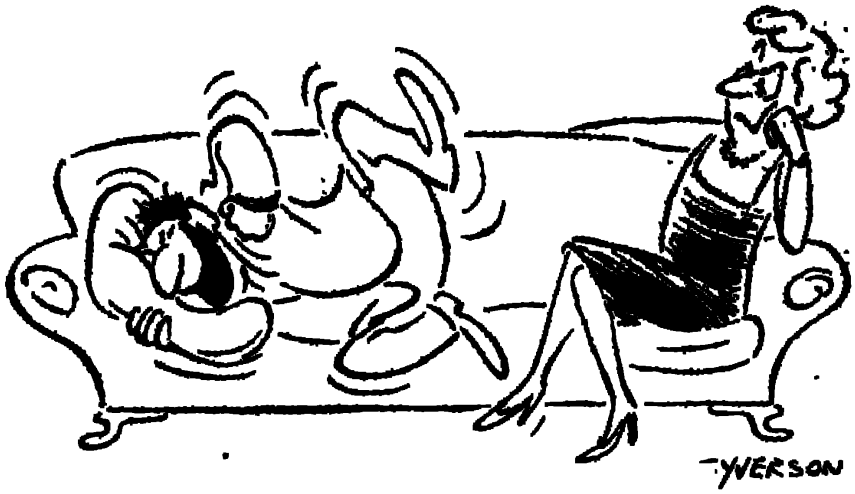
TWO RECKLESS drivers were up before the magistrate for having been involved in an accident.

"I wish to commend you two careless fellows," said the magistrate, "for having run into each other instead of some innocent person. If this sort of thing can be encouraged, we may have hit upon the solution to a serious problem." —L. A.

A PRISONER serving a sentence for armed robbery was taught to read and write under the prison's educational scheme.

"Now he's serving a term for forgery," reports the governor. "And I say this is progress." —Roger Allen

SEVEN-year-old Jimmy announced to his father that he wanted to get out of class two and go into class four. "All the older boys are studying cavemen and dinosaurs," he explained, "and I want to learn about those prehysterical times, too." —Mrs. Brice Hall



A joke's a joke. Or is it? asks the man who has discovered that . . .

Women Have No Sense of Humour

By Robert Thomas Allen

When I was six I said to a little girl who lived next door, "I bet I can stand two inches away from you and you can't touch me."

"How?" she asked.

"By standing behind a door." I laughed so hard that marbles rolled out of my pockets.

The little girl looked at me as if I were a frog. "What's so funny about that? *Nobody* could touch you if you were silly enough to stand behind a door."

In all the years since, I still haven't been able to make out a woman's sense of humour.

Women either laugh at the wrong time or at the wrong joke or they don't laugh at all. I know one quaint woman who says, "Hmmmm—then what?" after the joke is over; and another who laughs all the way through the joke until the punch line, then sobers up and asks me where I'm living now.

The whole thing, of course, is that the humour in a joke doesn't come from the joke itself, but from a lot of mental pictures, feelings and

Condensed from Maclean's

associations that the joke suggests. A person whose mental pictures are made up of new living-room curtains, little spring suits and Gregory Peck is sure to see things differently from a person whose psyche revolves round main bearings, trout-fishing and eager-eyed little typists.

Women carry round with them a solid ballast of down-to-earth realism that won't let them bounce very high. This is one reason for the dismal way they react to shaggy-dog stories which derive their humour from being contrary to reason.

One night I came home, and as soon as I got in the door I said, "You want to hear a funny joke, darling? Well, there was a man, see, and every day he sat in a restaurant with a piece of celery behind his ear. Then one day he put an onion behind his ear, and another man who had been watching him every day couldn't stand it any longer so he went over and said, 'I say, why have you got an onion behind your ear?' and the man says, 'They hadn't got any celery.' " The last words I just got out before I collapsed in helpless mirth.

My wife said, "Why didn't they have any celery?" Then she added absently, "That reminds me. We're having Bill and Grace over tonight. We need some cheese."

That night I told the joke to Bill and Grace. Bill let out a great belly laugh. Grace smiled amiably and said, "Celery is so expensive, too," then turned to my wife and said, "I said to myself just today that if food prices keep going up I'll have to get a husband who makes more money."

At this the two girls went into gales of laughter while Bill and I sat there solemnly sucking olives.

A woman doesn't give herself over to pure play as readily as a man. A man will hold up a business conference to tell a joke. A woman will listen to one only when the washing-up's done and the kids are safe with a sitter and she's out for the evening. In between she gives only a fraction of her mind to it, which isn't enough.

I remember the time I said to my wife, "You hear the one about the two old gentlemen sitting in a club, and one says: 'Sorry to hear you buried your wife this morning, old boy,' and the other says, 'Yes. Had to. Dead, you know.' "

My wife looked at me with the same expression she'd started with. My smile felt as if it were falling off my face in chunks.

"What did she die of?" my wife asked.

"Look," I said, flushing. "One chap says, 'Sorry to hear you buried your wife——' "

"I got that part," my wife said. "And don't start shouting. If you're going to carry on like that, I don't want to hear the story."

Another reason why things often go flat when a man tries to make a woman laugh is the fact that a man is telling the joke. A woman thinks

a man is funny most of the time, although she rarely lets him know. I've seen women go into hysterics telling one another how their husbands shop, or the way they pamper their cars, or behave with blondes. But for a *man* to start thinking he's funny spoils the joke.

I've found that it isn't just *my* wife's sense of humour I can't understand. I run into the same trouble with other men's wives. Occasionally at a party when things got rolling and one or two of the girls told a couple of jokes of a biological type, I used to dig up one of my own. The girls, including my wife, would all stop laughing. They'd look at their shoes, then one would turn to another and say brightly, "Your hair looks lovely since you let the ends grow."

Now I've learnt to tread lightly when it comes to mixing humour with women. I save my jokes until the boys are out in the kitchen watching me measure the drinks, and let the women go on talking about the little summer dress they picked up for next to nothing. Then one drops her voice to a whisper and soon the others burst into gales of laughter. Some day, somehow, I'll find out what's so funny.

Look Out!

In Kirby-Misperton, Yorkshire, zoo officials paid out more than £100 to visitors last year for articles stolen from them by monkeys. The monkeys specialize in snatching spectacles from the wearers' noses as the visitors bend forward to make out a sign on the cage that reads: "Warning—these monkeys snatch glasses." —UPI

A Question of Identity

He had an unhappy childhood and little formal education. His ambition to become an artist was bitterly opposed by his father. Although self-educated, he became the author of a book, the sales of which in his country ranked next to those of the Bible. Obstacles did not discourage him. People would say, "Why, you can't do that," but he hurdled one barrier after another. He placed a great deal of emphasis upon improving the health of young people, and he was known throughout the world as a dynamic speaker. One of his closest associates said of him: "He accomplishes great deeds out of the greatness of his heart, the passion of his will, and the goodness of his soul." The man: Adolf Hitler.

This description is used by Kenneth Keyes in *How to Develop Your Thinking Ability,* to show how easy it is to form a misleading picture from accurate and verifiable facts.

In Britain's betting shops, bingo halls and gaming clubs vast sums of money are changing hands. This is a review of the situation after three years of legalized

Gambling in Britain

By Irwin Ross

Since 1961 Britain has undergone the dizzying experience of legally indulging in just about every form of gambling. The Government's motive in bringing in the Betting and Gaming Act was simple: to legalize what it could not stamp out. Gambling, it declared, is an "instinct" impossible to suppress.

Britain can hardly be said to have become one vast Las Vegas, but foreign visitors are staggered by the variety of ways in which money is legitimately wagered. At race meetings and greyhound stadiums, a customer can bet either with a bookie or on the tote. Off the course, he can patronize a cash betting shop or telephone a credit bookmaker. It is even possible to wager on political events. Last October, when for more than a week it was uncertain who would succeed Harold Macmillan as Prime Minister, leading bookmakers gave daily odds on principal contenders, and newspapers printed the odds on their front pages.

Bingo is legal. So are gaming clubs where roulette, *chemin de fer* and poker are available. "One-armed bandits," another new feature of the British scene, take more than £10 million (Rs. 13 crores) a year. There are nearly 25,000 of these gaming machines, most of them set for sixpenny (33 np.) stakes. Each machine earns, on average, £8 (Rs. 107) a week for its proprietors, after payment of prize money and rental charges.

Britain's "wide-open" era began in May 1961 when betting shops,

bingo and gaming clubs became legal. For many years, illegal bookmaking and gaming had flourished, often with the tolerance or complicity of the police. R. A. Butler, then Home Secretary, told the House of Commons in 1959 "The failure of the authorities to enforce the law has brought the law into contempt." The only solution, Butler concluded, was to change the law.

The Betting and Gaming Act has had a number of consequences, the most dramatic being a vast upsurge in gambling. The Churches' Council on Gambling, which has long compiled meticulous statistics on the subject, estimates that gambling increased from £683 million (Rs. 910 crores) in 1960 to £853 million (Rs. 1,137 crores) in 1962, and may now exceed £1,000 million (Rs. 1,333 crores). Other estimates are even higher. John Chenery, a director of a syndicate owning 27 betting shops in London, places the annual "turnover" on horses alone at between £630 million (Rs. 840 crores) and £880 million (Rs. 1,173 crores) a year.

The new Act has had another universally recognized result: gambling is no longer a source of police corruption. There is dispute about how much corruption existed in the past. Bookmakers maintain that bribery was standard operating procedure. They say it was the man on the beat who was bribed and sometimes his sergeant. Today there is not the faintest suggestion of police bribery, for there is no longer any need of it: organized illegal gambling has ceased.

The cash betting shops which have recently sprung up are the most visible sign of the country's gambling fever. They are as respectable as the corner pub, with opaque glass windows extending to a point above eye level and the legend "Licensed Betting Office" limited by law to letters three inches high. The shops get round this by incorporating the term "Turf Accountant" (the standard euphemism for bookmaker) in the firm's name, so that one often sees letters two feet high proclaiming "John Jones Turf Accountant, Ltd.," followed by the more modest designation, "Licensed Betting Office."

Inside, the typical betting shop is a simple unadorned room with glass-enclosed cashier windows at one end, and along the walls narrow counters on which betting slips are written out; it somewhat resembles a branch post office. There is a large blackboard on which odds are chalked and a "blower" blaring forth race-course information and describing the race. The shops, open from between 9 and 10 a.m. to 6.30 p.m., make it as easy to place a bet as to buy a loaf of bread, and with their raucous blowers going all the afternoon they bring all the tension and excitement of the race course to thousands of street corners.

Housewives out shopping pop in for a flutter. Local tradesmen dash

in to place their selections on the three o'clock and then dash back to their customers. Old-age pensioners often use the betting shop as a meeting-place. Secretaries bring in their bosses' bets as well as their own. In a betting shop it is not unusual to see a house-painter in overalls appear three times in an hour and a half, listen to a race, and then dash back to his paint brush.

The popularity of the betting shops surprised everybody, not least their proprietors, most of whom had been doing some business illegally before the Act. One veteran bookmaker, who now has 11 shops in London, has noted a more than fivefold increase in his over-all volume. In one 13-week period last year, the nine shops he then had took £536,420 (Rs. 71·5 lakhs), earning a gross profit of £46,978 (Rs. 6·3 lakhs).

A total of 14,388 betting-office licences were issued by June 1963. Betting shops have been established in railway stations, on the parades of seaside resorts, in abandoned school buildings and, in one instance, on a fishing trawler plying the North Sea—it takes bets by radio from other fishermen. A bookmaker in Tunstall, Staffordshire, has opened a Ladies Betting Parlour with pink walls and a ceiling of duck-egg blue. A London bookmaker gave a free handbag to any woman who entered his shop at Christmastime. (This was illegal, but he got away with it.) Another tried to hand out trading stamps, but the authorities stopped him.

Most women who gamble are addicted to bingo, a craze indulged in by some 14 million people organized in 12,000 clubs. I attended a typical bingo session one Monday night at a hall in a London suburb. The game was to start at eight. The 900 seats were filled by 7.45, three-quarters of them by women. The typical bingo enthusiast is a middle-aged, working-class woman with time on her hands and a husband at the pub; she is bored with the telly and eager to spend eight or ten shillings an evening for a chance at the jackpot. Promptly at eight, a Master of Ceremonies in a dinner jacket appeared on the platform and announced smartly, "Eyes down and let's play bingo!"

The crowd was instantly silent and, as the M.C. intoned the numbers ("two little ducks—22," "box of tricks—number 6"), the tension became as oppressive as the cigarette smoke hanging under the chandeliers. Then someone sang out, "Bingo!" The suspense broke and there was an excited babble of voices. In all, there were three bingo sessions of half an hour each, separated by 15-minute periods for refreshments. Prizes ranged from £4 (Rs. 53) to £45 (Rs. 600).

Under the new Act, games of chance are legal provided they are played in private, in effect in clubs, with all the players having an equal chance and all the stake

money going to the winners—no "house cut." In the case of bingo, the Government thought it was merely legalizing a mild diversion popular in church bazaars; instead, it opened the way to a vast commercial exploitation of a game which anyone can play.

The promoters promptly established their own clubs, with printed membership cards, no dues and the simple restriction that one had to be a member for 24 hours before playing. They make their money by charging admission fees—generally half a crown (Rs. 1·7)—and selling refreshments. The prize money comes from the sale of bingo-card booklets. To accommodate the throngs, hundreds of cinemas, ballrooms and dance halls have been turned into bingo halls. The Churches' Council estimates that the annual turnover on bingo is £85 million (Rs 113 crores); admission fees probably come to about £12 million (Rs. 16 crores). Bingo today is big business.

So are gaming clubs, another development the Government did not anticipate. The framers of the Act thought that they had made it unprofitable to promote games like *chemin de fer* by outlawing the "house cut" and only allowing clubs to collect a fee for each session of play. It was assumed that the fee would be for a whole afternoon's or evening's play, which would provide slim pickings for any commercial establishment. Instead the clubs charge a fee, sometimes as high as £10 (Rs. 133), for every "shoe"—a tray-like box of cards which are played in about 35 minutes—making *chemin de fer* a gold mine for its sponsors. Similar ingenuity has made it worthwhile to promote roulette.

In London, there are now half a dozen elegant establishments like Aspinall's Clermont Club, and Crockford's (with 3,000 members), where the gold nap underfoot is an inch thick and all the croupiers have been imported from France. More modest establishments are as cosy and unpretentious as the local pub.

There are about 23,000 gaming clubs in Britain, most of them highly profitable for their proprietors. In Crockford's first four months of operations, the syndicate running it made gross profits of £173,000 (Rs. 23 lakhs). Shares in the corporation were originally sold for ten shillings (Rs. 6·7) each; two years later they fetched £30 (Rs. 400).

Disquieting signs suggest that for many people the jolly little flutter is no trifling indulgence. There is evidence that the people who can least afford it bet the most. Bookmakers, for instance, agree that betting shops in the poorer sections of cities do much better than those in higher-class residential areas.

The largest concentration of betting shops are in poor neighbourhoods. In the London working-class district of Bermondsey, the Methodist Settlement conducted a year-long

survey of gambling habits in which 3,000 people were interviewed. The Reverend Clifford Johnson, who supervised the study, concluded: "The new Act has made the largest revolution in the habits of the working class since the war. We estimate that gambling turnover has gone up 150 per cent. Two-thirds of the families interviewed bet regularly." Johnson continues, "People don't think there is any reason why they should not gamble. Life, they say, is uncertain. Gambling is a projection of life, not a question of right or wrong."

Four per cent of the regular betters were definitely hardship cases—people who were unemployed, sick, on national assistance or largely subsisting on old-age pensions. In some instances, the hardship was caused by gambling debts. A cabinet-maker earning £17 (Rs. 227) a week owed the bookies more than £100 (Rs. 1,333) when his son won a scholarship to a good school. Tuition was free, but the boy's books and clothes would cost about £35 (Rs. 467). The father was unable to pay off the bookies and also finance his son, and so the scholarship had to be relinquished.

More significant, perhaps, is the finding by the National Union of Small Shopkeepers that its members have experienced a ten-per-cent rise in bad debts since the Act came into effect. In some areas of the country the increase has been 20 per cent. Union Vice-President D. W. Harrison states: "Since the gambling shops have opened, there has been a definite tendency of housewives to forget the milk bill, the newsagent's bill, the payment on the television set."

The Betting and Gaming Act has achieved some of its main purposes: to bring the law into accord with current practice and to eradicate any trace of police corruption. In its effort to achieve these ends without encouraging the "excesses" to which gambling is all too prone, it has been less successful. Many people think that it was a major mistake to allow betting shops to remain open all day. No one has all the answers. Some of them, however, are now known to the Commissioners of Customs and Excise who recently carried out an enquiry into gaming to determine "whether it would be expedient to impose taxation." The Chancellor of the Exchequer is as interested in winners as any punter.

Mechanical Reply

A SMALL computer with built-in gallantry has been on show. It tells people's ages after receiving answers to questions. But one question is, "Are you female?"—and if the answer is "yes," the computer automatically gives the age as "21." —Pat Englehart

FOUR DAYS OF TELEVISION HISTORY

When President Kennedy was assassinated last November, the U.S. broadcasting networks faced a challenge calling for unprecedented resourcefulness

By James Winchester

IN THE newsroom of Station WFAA-TV, the American Broadcasting Company's affiliate in Dallas, broadcaster John Allen listened perfunctorily last November 22 to routine chatter on a special shortwave channel. It was being used by Dallas police to coordinate their supervision of the motorcade bearing President and Mrs. Kennedy from Love Field, the airport, to the Trade Mart, where the President was to deliver a noontime speech.

Suddenly Allen heard outcries from the motorcycle policemen escorting the President. "I could grasp only fragments," Allen recalls. "Ordinarily I wouldn't put such scrappy information on the air. But years of experience told me that this was no false alarm."

Snapping the emergency switch to the control room, Allen shouted, "I've got a bulletin!" Instantly he was cut into a programme. "Three shots have been fired at President Kennedy's motorcade at Elm and Houston," he broadcast. The time was 12.31 p.m. American Central

Condensed from Television Age

Standard Time, about 30 seconds after the bullets hit the President and Texas Governor John Connally.

With these 13 momentous words, the first to be broadcast of that shameful Friday's tragedy, Allen set in motion an unprecedented achievement of voice and vision. For four days, television and radio, rising to a brutally demanding task, were the eyes, the ears, the nerve centre of a great part of the world.

Forgetting costs and rivalries, the broadcasters co-operated to keep the public completely and continuously informed. The tragic drama, as it was unfolded, was a personal experience in millions of grief-stricken homes everywhere.

America's four days of living history were shared with the world. There were eight television transmissions to 22 countries in Europe, including all but Albania in the communist *bloc*.

It was the first time the Soviet Union had requested live coverage of a U.S. event. Japan also received its first live television programming from the United States via the new Relay satellite. Radio coverage was transmitted direct to 35 countries and miles of taped radio shows and television film went abroad by jet.

From sniper's shot on Friday to the bugler's blowing of "taps" at Arlington National Cemetery on Monday, hardly a discordant note was sounded. Commercial programming was halted at once and was not resumed until Tuesday morning —after some 80 hours had been devoted to the sight and sound of history as it was happening.

Photographs taken by David Weigman, NBC-TV cameraman travelling four cars behind the President in the motorcade, showed people near the President's car throwing themselves to the ground, policemen drawing their guns. John Hofen, a soundsman assigned to Weigman, was ordered to get the undeveloped films to the NBC-affiliated station in Fort Worth for immediate processing and showing. Hofen dashed into the street and stopped the first passing car. "Can you help me?" he pleaded. "Let's go!" the driver responded. They covered the 30 miles in record time.

Emergencies called forth instant resourcefulness. When NBC got a mobile unit to Dallas its engine failed and there was no time for repairs. A wrecker hauled the huge van round from one fast-breaking news point to another for three days.

At KRLD, the Columbia Broadcasting System's affiliate in Dallas, the water-pressure system feeding the television film-processing unit also broke down on Friday afternoon. Technicians grabbed the unit's fire hose, ran down to the street, tapped a city water main, carried the hose back into the building and kept their processing machines going for the next four days.

President Johnson, by his presence of mind, helped in the drama of

history-making. As three reporters crowded into the Presidential jet at Love Field for the oath which would make him America's 36th Chief Executive, Johnson noticed that Sid Davis of the Westinghouse Broadcasting Company, one of the three correspondents representing all news media, had no recording equipment. "Use the Dictograph on the desk," Johnson ordered. The microphone was held between Johnson and U.S. District Judge Sarah Hughes as the Presidential oath of office was administered. That night, copies of this tape recording were given to every radio and television network. Faint and scratchy but still dramatically audible, the original now rests in the U.S. National Archives.

Masterly jobs of reporting were accomplished. NBC correspondent Tom Pettit achieved immediate fame with his on-camera description of the shooting of Lee Harvey Oswald by Dallas nightclub operator Jack Ruby, in the Dallas city-jail basement. Pettit was looking straight at Oswald and talking about him to the television audience when this most public murder in history exploded five feet away. He kept talking for half an hour.

Many newscasters were on the air for hours. At first they reacted almost automatically; then they had to struggle with their emotions as they became fully aware of the tragedy. "On two or three occasions I almost broke down," says veteran newscaster Walter Cronkite. Time became a blur. Working hours were forgotten. Unions closed their eyes as cameramen handled sound, directors shifted equipment and executives worked as copy boys. Hardly anyone slept.

Telephone-company specialists performed miracles in setting up the lines of communication. Circuits had to be patched together.

Temporary television and radio lines were established to scores of points. One hasty installation was to Andrews Air Force Base, Maryland, 12 miles from Washington. The Chesapeake & Potomac Telephone Company had less than two hours' notice that President Johnson was arriving aboard the Presidential jet with Mrs. Kennedy and the body of the late President. The new President wanted to speak to his compatriots when he stepped off the plane. The job *had* to be done. Dick Bowler, a phone-company installation engineer, and a six-man crew did it.

Working together, television and telephone technicians had everything wired just two minutes before President Johnson's jet whined to a halt. "There was no time for testing," a technician recalls. "We just turned on the switches, aimed the transmitter towards Washington and prayed." Miraculously, everything worked.

Co-operation between networks was common throughout the crisis. The greatest such effort was on

Sunday and Monday, when the networks united to cover the cortège from the White House to the Capitol, the eulogies and night-long watch at the Capitol, the airport arrivals of foreign heads of state, the solemn Mass, the funeral and the State Department reception following. For the television pool pictures, 41 cameras were set up in 22 locations. Counting the cameras each network had for its own coverage, nearly 100 cameras were involved.

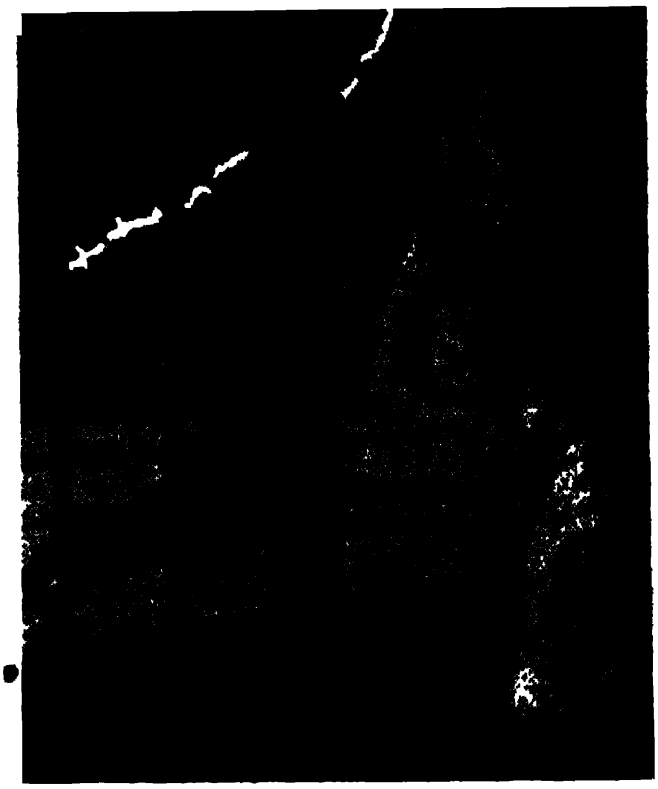
Even so, this was not enough. During the funeral, camera crews, after filming the mourners leaving the Capitol, tore down their units and leap-frogged ahead, made new connexions and photographed the procession again as it repassed them.

It was the largest television effort in American history, and all the more impressive because it was virtually unplanned. At about 8.30 p.m. on Saturday it was confirmed that the funeral and burial would take place in Washington rather than in Boston. Facilities were set up along the route of the funeral procession in six hours. By comparison, it usually takes three months to plan the television coverage for a Presidential inauguration.

Washington headquarters for the television pool was a small room, normally used to store cement, located beneath the Capitol steps. Thirty men jammed the room together with electronic gear, wires and cables. Amid the confusion, pool director Norman Gorin watched the pictures coming in from the widely scattered cameras on 18 individual monitors and picked the one he wanted on the air at each moment. Decisions were made in split seconds. When Jack Dillon, directing a television camera crew, saw the imposing array of heads of state surging out of the White House gates to join the funeral parade, he grabbed the telephone that linked him to Gorin's desk. "Switch to me," he shouted. "Here comes a mob of kings!"

Most impressive during the solemn proceedings, however, was the broadcasters' regard for dignity. Commentators were warned to keep their talk to a minimum. Cameras were placed so that there would never be a full-face close-up of any member of the Kennedy family. At St. Matthew's, where the Mass was said, television cameramen, permitted inside the church for the first time, were required to wear formal morning dress. The announcement came at 3 a.m. Since the men, who had been suddenly recruited from Baltimore, had only ordinary suits with them, a clothes rental-firm owner was routed out of bed, and by 6 a.m. the men were outfitted.

U.S. Federal Communications Commission Chairman William Henry said, "In meeting this tremendous challenge, the broadcasting industry earned the heartfelt gratitude of people everywhere for the manner in which it fulfilled its vital public trust."



Teach Your Child to 'LOVE THE STORM"

The most important lesson in life

By JENKIN LLOYD JONES

ON THE day his mother died, a newspaper columnist wrote his masterpiece. He captioned it "She Taught Me to Love the Storm."

He described how, as a child, he was terrified by thunder and lightning. He used to hide, trembling, in his bedroom wardrobe. But his mother would come for him and lead him by the hand down to the front porch, where the display of heavenly violence could be seen in full force. There she described the glory of a firmament that could produce these things, and spoke of what a privilege it was for puny man to have his life enriched by this power, even if there was danger in it. Gradually the boy learned to love

the storm. And all the things that make storms in life—controversy, reverses, criticism—no longer terrified him.

In this awesome atomic age when man-made lightning dwarfs the thunderbolts of nature, what greater gift can a parent leave to his child than the gift of courage? What is more important than to teach your child to live with lightning?

It is popular to be tragic about what a terrible world this is in which to bring up a child. That is rubbish. It's a fine time to have a child. Bomb or no bomb, a child's chances of reaching his tenth birthday have never been brighter. Look at any ancient graveyard, where one-third of the headstones mark the dust of children.

This is merely a poor time to raise sissies. These are not good years for cry-babies, whiners and hiders-in-the-wardrobe. There are no absolutely safe places any more. Sissies had it easier in the past. There was a time when a man could live out his life and never witness a human crisis or hear a shot fired in anger. The modern child has no such assurance. The road is in the mountains now. It clings to the precipices and looks down into the chasms. The distant vistas are tremendously exciting. But it's no road for the timid.

The true art of being a parent these days lies in giving your child a balanced diet of security and struggle. The child must have love, but not the surfeiting love that smothers self-reliance. The child must feel the whip and goad of struggle, but not to the point where he is shattered by insecurity.

The saddest spectacle in the world is the parent who stands outside the juvenile court and wails, "But we tried to give him everything!"

Everything? A good allowance, perhaps. A car, possibly. But how about a sense of values? How about the joy of earning, the great growing-up lift of a reward for a job well done? How about the satisfaction of helping the family to resolve a problem, the understanding of work that would have made him respect the fruits of the work of others? How about the inexpressible happiness that comes to a boy who finds he is being treated like a man?

The mountain cedar is born to wind and sleet, and lives a long, long time, thanks to its tough core and clinging roots. The stately royal palm is nurtured in warm sun and tropic breezes. Its pith is soft. Its roots are shallow. It can't survive the hurricane. Durable are the children who have been taught to love the storm. Happy are the parents of the young mountain cedars.

IF YOU want to know what your wife is going to ask you to do next try sitting down —*M.F.H.*



From Corfu to Tahiti, the Club Méditerranée's thatched-hut villages afford simple pleasures in idyllic surroundings

SUNSHINE CLUB FOR HOLIDAYMAKERS

By James Stewart-Gordon

It was a balmy June afternoon in Paris, and I was sitting in a café near the Gare de Lyon. The café was filled with islands of gorgeous girls, ringed by waves of young and not-so-young men. Surrounding us was a sea of luggage.

The girls and men and I, a dew-fresh member, belonged to a unique organization for holidaymakers called the Club Méditerranée. Fourteen years ago Club Méditerranée was only a gleam in the mind of Gérard Blitz, a young Belgian diamond-cutter. Today it is a 250,000-member, 60-million-franc (Rs. 5·7 crores) operation which has established "holiday villages" that dot the Mediterranean coastline from Spain to Israel and burst forth exuberantly in the Alps. There is also a "paradise" in Tahiti.

Suddenly an announcement was broadcast in our café staging area. Everyone picked up bags and moved towards the train. I was off on a

Condensed from Watersport and Motor Cruising

holiday that turned out to combine sun, sand and South Seas-type relaxation in such delightful quantities that in no time at all I was looking back on Henry Thoreau as a slave to civilization.

To join the Club Méditerranée costs 15 francs. Members run the gamut of age, wealth and nationality. In summer they pour south to their 12 Mediterranean villages, most modelled to look like a South Seas grass-hut settlement, and each with a sports speciality ardently practised by initiates and taught at free classes for beginners. Some, like Cefalu in Sicily, feature sailing. Others, in Italy and Spain, go in for skin diving and water skiing. In winter, members swarm to their ten villages in the Alps for skiing and skating.

Summer or winter, sand or snow, the fundamental ingredients of a Club Méditerranée holiday remain the same: low cost, monumental French meals, free wine, informality and a complete sense of equality.

As one of the staff told me, "In a bikini"—that's the club's summertime female costume—"you can't tell a duchess from a typist, and we have both."

In St. Moritz, where the club has bought two of the luxury hotels, two men, sharing a room, began conversing. Soon the older man remarked that the other seemed to know a good deal about the paper business. "I ought to," the young man replied. "I'm an assistant bookkeeper in one of the largest paper companies in France."

"Which one?"

The book-keeper told him, then asked, "And what do you do?"

"I'm the chairman of your company."

The founder of Club Méditerranée, Gérard Blitz, is a tall, handsome former water-polo star. During the war he performed such bold feats on behalf of the Resistance that he was awarded 15 decorations. He also saw the warm, blue Mediterranean for the first time.

After the war Blitz moved to Paris, where he resumed earning his living by diamond cutting. He spent much of his free time with his swimming friends, however. Remembering longingly the Côte d'Azur, he suggested one day that they start a sort of Olympic-village-on-the-Mediterranean, where people could go for inexpensive holidays. "People want sun. They want to swim. They want good food. They want an absolute break from routine and convention. Let's give them all these things—and charge them reasonably."

This was the beginning. Soon Blitz put up posters in the Métro. They showed a pine tree set on a beach with tumbling surf under brilliant sunlight—and, at the bottom, "Club Méditerranée," plus Blitz's phone number.

The phone began ringing almost immediately. Unfortunately, Blitz

had not investigated far enough ahead to know what cost he should quote. So, for two weeks at the Club Méditerranée, including food, shelter (in a tent), transportation, swimming instruction and dancing to the music of an accordion, he named the first price that popped into his head: 240 francs (about Rs. 230).

Some 2,600 people signed up. Blitz, who had hoped for perhaps 200, found himself with problems. The village, located near Alcudia, on the island of Majorca, soon even ran out of drinking water. Revolt threatened. Seizing the microphone of the public-address system, Blitz began his plea for patience by referring to the club members as *Gentils Membres* (Nice Members). Each time thereafter that a crisis developed, he used the expression again. This led to the members referring to one another as *Gentil Membre*—finally shortened to G.M., now the official designation for guests. The staff members are called *Gentils Organisateurs* or G.O.'s.

Today, with the club grown to colossal proportions, the operating machinery is invisible but efficient. Daily, decisions have to be made involving everything from high-level international diplomacy (new villages are being planned in half a dozen countries) to the amount of garlic in the salad (French, Italians and Spaniards like lashings of the stuff; the English prefer less). Since the club's membership is 68-per-cent French, and each of these 170,000 Frenchmen sees himself as a connoisseur of what constitutes a proper meal, a corps of chefs has been employed, many of them graduates of such gastronomic temples as Maxim's.

All club holiday arrangements include transportation. This responsibility means an annual movement comparable to lifting ten army divisions. Members have to be ferried to Greece, Italy, Spain, Morocco, Switzerland, Israel, Yugoslavia and Tahiti. To get the people there and back, Blitz signs up jets, trains, buses and boats. Club Méditerranée has become the Italian Railways' and Air France's largest civilian customer.

Once the G.M.'s reach a club "paradise" they can take excursions to various points of interest—ancient cities and temples in Greece, bazaars in North Africa, relics of past civilization in Sicily and Italy. There are also simpler expeditions (*piqueniques*), plus daily trips by sailing-boat on the Mediterranean or around near-by islands. Longer boat trips (*bivouacs*), may last from three days to a week. The dozen people on board drift or sail in and out of bays, inlets and coves, swimming from the boat, fishing, drinking the native wine and sleeping on deck or on sandy beaches.

The club's largest village is on Corfu, not far off the Albanian coast. That's where I went. Some 1,350 people can be housed in its Tahitian-style grass huts with

thatched roofs. The huts stand in rows in a rough semicircle around the main structures—the open-air restaurant, the dance floor and the bar.

Mountainous and covered with olive groves, Corfu is incredibly beautiful. Lying on my bed, I could see through the doorway of my hut the vast, mauve Albanian mountains. I awakened to the red disc of the sun and the calling of Greek bugles sounding from lonely army posts in the hills. Although there were people of 19 nationalities in the village, no one seemed to have much difficulty in making himself understood. Conversations in broken French, English, Spanish and Italian pattered on like rain on a roof.

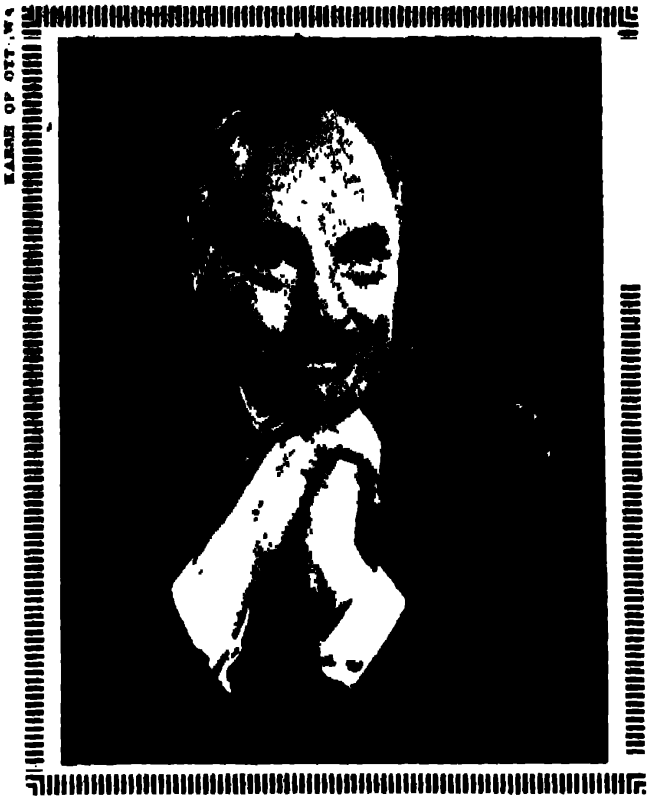
There was, I discovered, no electricity or hot water in my hut. But after a couple of days I made another discovery—if there is no hot water, you can't complain about the hot water going off. If there is no electric light to read by when you go to bed, you sleep instead of read. A sort of beachcombing languor overtakes you, and nothing seems at all pressing or important.

This was demonstrated my first week at Corfu. Shortly after my arrival, I went to see a Greek wedding just outside the village. I found a fellow countryman of mine standing at my elbow. He told me he had been at the club for two days with his wife and two children, and if he hadn't paid for two weeks in advance he would leave now. His complaint concerned the lack of sheets. (Everyone has to provide his own, or a sleeping-bag.) While he complained, he smoked furiously, snapping half-smoked cigarettes into the sand.

A few days later I saw him again. This time he was lying in the shade of an olive tree, blinking his eyes slowly and smiling at nothing in particular. When I offered him a cigarette, he shook his head. "I've been trying to give up smoking for 15 years, and I never managed it," he said. "The other day I was lying here looking at the water, and I thought about smoking, but I hadn't any matches. I had some in the hut, but I weighed it up: Would I rather get up and get matches and smoke, or lie here and forget it? That's when I gave up smoking." All problems, according to Club Méditerranée, are soluble in salt water. Who am I to dispute this now?



It is a strange but mathematical fact that when a 17-year-old boy borrows the family car, he can, in one night, subtract five years from the life of the car and add them to the age of his father. —Bett Anderson



South Africa's King of Diamonds

Profile of Harry Oppenheimer, who is more than just a name in the Republic and a symbol of many things

By Gordon Gaskill

He is a multimillionaire with a split-level mind. At one level, he runs with cool brilliance one of the world's widest, richest, strangest business empires, based mainly in South Africa. On another level, impelled by thoughtful conviction, his is one of the most eloquent voices criticizing apartheid.

Yet Harry Frederick Oppenheimer looks utterly unlike a world tycoon or a social critic. In one mood he seems a shy, reserved intellectual. In another, with his dapper moustache and twinkling eyes, he could be a debonair French *boulevardier*.

Oppenheimer is the Free World's greatest single producer of gold, turning out about one-sixth of it. His empire includes some 50 mines and embraces a bewildering variety of other interests: uranium, timber, plastics, tyres, sugar, iron and steel, fertilizers, banking, explosives, fisheries, road materials, breweries . . . ad almost infinitum.

Oppenheimer's Anglo American group is the greatest single business influence in all Africa, with power that stretches out to Europe and

North America. It is by far the largest industrial employer in Africa; its employees include some 24,000 whites and about 140,000 non-whites. The group's assets now total a staggering Rs. 1,425 crores. Last year its profits before taxes were about Rs. 233 crores; after taxes, Rs. 167 crores.

Harry Oppenheimer was brought up with a diamond-studded, solid-gold spoon in his mouth. His father, Ernest Oppenheimer, the son of a modest German cigar merchant, was sent to Britain at 16 as an apprentice in a diamond firm. In 1902, Ernest went to South Africa to buy diamonds for his firm. There the immigrant youth of 22 bargained, battled, built and bought until he had formed a goliath of industry.

He made his boldest, luckiest stroke in 1917, when he got into gold mining in the Transvaal—with the financial backing of the J. P. Morgan firm, to which he had been introduced by an American mining engineer, Herbert Hoover. In gratitude, Oppenheimer named his new company The Anglo American Corporation of South Africa. (The Morgan firm soon sold its shares at a handsome profit; there is hardly any "American" interest in the company now.)

But diamonds were Ernest Oppenheimer's first and last love. In 1929, using his huge gold profits as ammunition, he took over the vast De Beers diamond empire, control of which has remained in the Oppenheimer family ever since.

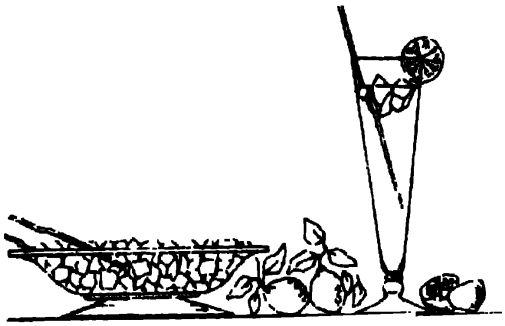
Sir Ernest—he was knighted for his services to the Allies in the First World War—had two sons. The younger was drowned in a swimming accident in 1935. Harry, accordingly, was groomed for responsibility; from his teens he worked hard at mastering the intricacies of the group's giant complex. He took an honours degree at Oxford (in politics, philosophy and economics), and on his 21st birthday his father presented him with 10,000 shares of Anglo American stock.

During the last war, Harry served as a Captain with the Armoured Car Brigade that roved through the Western Desert during the worst of the Eighth Army's battles against Rommel.

A former colonel recalls that Oppenheimer's German was good enough to trick enemy gunners. "He would horn in on their wireless bands, pretending to be a German observer directing their fire, and bark out orders to fire at such-and-such a range—always too long or too short, of course."

From 1948 until 1957 Harry was in politics, standing for and being elected for Kimberley. Then, in 1957, his father died, and full control of the vast Oppenheimer empire passed into Harry's hands.

In 1957, the group consisted of about 100 companies. Since then, Oppenheimer has added about 50 more. Says one South African, "The



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Oppenheimers collect companies the way other people collect stamps." Instead of having one giant copper corporation, for example, the Oppenheimers have found it useful, for both economic and political reasons, to set up a lot of them: one for each mine, another to refine copper, another to manufacture copper products, often with different companies in each of a dozen nations. At the last count, Harry Oppenheimer was director of 106 companies, chairman of no fewer than 44.

Diamonds are easily the most fascinating Oppenheimer operation. It is almost the only business where *everybody*, including the consumer, insists that prices be kept high. For who would want diamonds if you could buy a big one at a department store for Rs. 5?

The De Beers diamond set-up, perfected by the Oppenheimers, was invented by Cecil Rhodes, on the theory that diamond production should just about equal the number of new engagements in the world. De Beers proposes to buy all diamonds mined by anybody anywhere, and to sell them at ever-high prices. Other diamond diggers or merchants are not forced to comply with this arrangement, but most of them do—even many of the newly independent African states—because they have found it good business. Meanwhile, De Beers freely gives technical advice, and the services of its unique Diamond Research Laboratory, to *any* diamond producer, even if he sells outside De Beers channels.

Oppenheimer's own De Beers mines and fields (ten of them) produce, by value, more than half of all the world's gem diamonds, and the Oppenheimer-controlled Central Selling Organization (in London) sells more than 85 per cent of all diamonds, gem and industrial. In 1963 its sales—the greatest ever—came to Rs. 153 crores. De Beers offers a merchant a parcel of diamonds at an absolutely fixed price; the merchant must buy all the diamonds in the parcel, or none. Arrogant as this sounds, De Beers expertise and honesty are so respected that, in practice, the system works quite happily. In April, the Central Selling Organization increased the price of diamonds by ten per cent.

The gold business is nearly as remarkable. This product has a world price of Rs. 166 per fine ounce, fixed by the United States in 1934 and unchanged since. (Gold producers believe that the price should be raised —at least doubled.) South Africa last year dug and sold a record amount of gold: 27·4 million fine ounces, which was two-thirds of all the Free World's gold production and fetched Rs. 456 crores. Oppenheimer's own 11 mines produced more than one-third of this, or about 300 tons of pure gold.

Three of his mines *each* produce as much yearly as do *all* America's gold mines together. The Western



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Deep Levels, which he and his wife opened ceremonially in 1962 with the traditional gesture of touching a gold ingot, will soon not merely exceed all his others but probably turn out to be the richest gold mine ever worked anywhere. Its known ore reserves are valued, at today's prices, at Rs. 1,064 crores. Already miners are at work at 6,000 feet and will soon be at 10,000.

Harry Oppenheimer is one of the best-known men in South Africa, and one of the least-known. Says an associate: "He's got as many facets as a well-cut diamond—and that's 58." He rears, rides and races fine horses, reads omnivorously in four languages, collects fine paintings. He dislikes the usual social whirl and small talk, but will talk the clock round—on poetry, philosophy, politics, art—if he meets a kindred soul. How rich is he? Even the lowest guesses make him easily the richest citizen in Africa.

He travels widely round his company holdings, and participates in a vast range of philanthropies. A long list of roads, bridges, parks, schools, libraries, laboratories, scholarships and the like owe their existence to the Oppenheimers. But for all his apparent outgoingness, few people can truthfully say, "I know Harry well."

Life at "Brenthurst," the 48-acre Oppenheimer estate in the Johannesburg suburb of Parktown, is quiet but opulent. Legend has its pathways "paved with gold." In fact, some paths *are* made of cores of ore taken from exploring drills, and from crucibles which once contained gold. In the sunlight, they sometimes do give off the soft glint of gold.

Besides having a sharp and well-honed intelligence, Oppenheimer is endowed with a cool nerve that has been evident in business as in war, and today is almost legendary. Not long ago, while being driven with two friends on an open road, he was sitting at the back reading a newspaper. The car, travelling at nearly 100 m.p.h., suddenly topped a rise to find a herd of cattle crossing the road just ahead. Braking was impossible, and the driver could only thread his way desperately among the animals, with a fatal collision seemingly unavoidable. Oppenheimer looked up at the cattle flashing by. "Remarkable!" he exclaimed—and went back to reading his newspaper.

In coming days Harry Oppenheimer will need strong nerves. The government's Bantustan policy faces tremendous difficulties if it is to succeed in offering a non-violent solution to the racial problem. Like most South Africans, Oppenheimer feels that the Bantu are not ready for one man, one vote; that to give it to them might well plunge the Republic into an inferno—and would certainly destroy Africa's only modern industrial civilization, much as a jet airliner would be smashed if a small child took over

the controls. Yet he has outspokenly criticized many of the government's racial policies, and time and again, clearly and unequivocally, he has voiced his distaste for racial discrimination.

His solution: the establishment of certain minimum standards of education, perhaps of financial standing, for all voters, white and non-white. Today such a plan would favour the whites. Inevitably, however, with intensive education and prosperity, more and more non-whites would qualify until they would become a voting majority.

Such a moderate position satisfies hardly anybody in South Africa. To some of apartheid's fanatic defenders it sounds like near-treason.

Meanwhile, in countries to the north, Oppenheimer's conduct over the years has won him the respect and confidence of many African leaders—who realize that they will desperately need outside capital and know-how for a long time to come. Northern Rhodesia, where the group has vast copper interests, is an example. Living in Oppenheimer-built family housing, African workers have company-provided schools, hospitals, medical care, recreation—all virtually free. They have a low crime rate, stay on for years, grow more efficient, earn promotion and higher pay.

In the rising racial pressures of South Africa today, an old-fashioned liberal like Oppenheimer is as rare as a white rhinoceros. He is fond of quoting, with wry melancholy, a passage from the Book of Job especially apt for a master miner: *"Iron is taken out of the earth, and brass is molten out of the stone . . . and it hath dust of gold. But where shall wisdom be found? And where is the place of understanding?"*

Harry Oppenheimer also likes to quote a statement his father once made: "The aim of the Anglo American Corporation is to make profits for our shareholders, but to do it in such a way as to make a real contribution to the welfare of the countries where we operate."

He has always been an optimist, as most great businessmen must be, and has found a comforting symbolism in the family motto his father chose when he was knighted: *Spero Optima*—"I hope for the best."

Pardon, Your Slip is Showing

"Our mixed chorus sang last Sunday in a regional broadcast from Minneapolis. It was nice to hear them and realize they were nearly a thousand miles away." —From a church bulletin

"At 7 and 9 p.m. in the Temple B'nai Israel, Rabbi Irving Hausman will speak on In Spite of Everything." —From the Sacramento *Bee*



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Help in Time of Sorrow

There are ways to bring comfort to people who are suffering loss. The most important ingredient is human understanding

By Elizabeth Byrd

THE PEAK of his play-writing career Oscar Wilde was a witty cynic, glib as his own epigrams. Then he was sent to jail on a morals charge—a tragic degradation. When he was released he could no longer create sparkling comedies. He had no heart for the superficial. He had learnt that life is also serious, and he wrote what to me is his most beautiful line: "Where there is sorrow there is holy ground."

All of us must tread this ground at one time or another. Friends suffer injury or bereavement. We want desperately to console them but we don't know how. In a letter of condolence, for example, how can we avoid clichés and bring some measure of true consolation?

A friend of mine found a way to do this after my fiancé died. She sent me a note that said simply, "Do you remember the night you and Phil and I read poetry by the fire?" She enclosed a few lines of verse.

She had turned time back to the previous autumn when we sat in my living room in the bloom of firelight. Phil lay stretched on the hearth rug reading aloud:

> ". . . together you shall be forever more.
> You shall be together when the white wings of death scatter your days." *

Had Phil believed those words? Probably, otherwise he would not have chosen to read them. For the first time since his death I felt comforted, not from the verse alone but through my friend's understanding of my need.

In first grief we are not trying to

* *The Prophet*, by Kahlil Gibran.

Condensed from Guideposts

forget, but striving to remember. To be assured that time will heal is then almost an offence to our sorrow. Phillips Brooks, author of the hymn "O Little Town of Bethlehem," wrote to a friend whose mother had died: "People bring us but miserable consolation when they tell what time will do to help our grief, because our grief is bound up with our love and we could not cease to mourn without being robbed of our affections."

Even more difficult than writing to the bereaved is witnessing their first raw grief. We don't know what to say and in our helplessness we are often painfully mute. Perhaps this is providential at first. Helen Keller wrote, " 'There is so little I can say' is often said in apology by friends. If they but knew that any words--even the most beautiful--are an intrusion at such a time, and that the truest sympathy comes with a warm handclasp." Later, when the bereaved *want* to talk of their loss, we should encourage them.

"The person who brought me the greatest comfort," a widow told me, "was a woman who had moved next door just before Jerry was killed in the war. Often she brought me food or books, but she didn't linger to talk because she sensed that I was too depressed for words.

"Then one night I reached a sort of crisis of grief and I phoned her to come over. When she came she immediately asked me to do her a favour. She said, 'Jerry might have been my neighbour, so I feel cheated that I never knew him. Do you mind telling me about him?'

"Suddenly I longed to talk of Jerry. I poured out everything I had previously repressed and the tears came in a purging flood. It was my first step towards the peace of mind that comes with resignation."

Children who suffer loss are a particularly poignant problem. A child's consolation may come mainly in knowing that he is not only loved but *needed* during the period of sorrow.

A wife whose husband died told me that her grief was diffused by worry over Peter, their ten-year-old son. "Immediately after David's death, Peter became curiously reticent. I felt that I couldn't reach through the wall he had built around himself.

"Then one afternoon he went out to the newsstand, brought back the evening paper, sat down in David's chair and began to read. Later he turned on the television, not to his favourite Western, but to the news. After dinner he went round the house inspecting the doors and windows. He reminded me that we had better fit new draught excluders before the winter.

"By now, of course, I realized what he was doing and why he hadn't permitted himself to cry in my presence. By emulating his father he was trying to provide the comfort and security we had lost. It took all my will power not to hug

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him, but I wouldn't have spoilt his new dignity for the world."

True consolation cannot be limited to the moment. A clergyman once told me, "The bereaved person is usually surrounded by friends and cushioned by every comfort they can provide—at first. But what happens a few weeks later? The anaesthetic of his initial shock has worn off. The sad little tasks that kept him busy are all accomplished. The friends drift off to their own concerns. He is left alone too soon.

"Several years ago a widow in my congregation, with the help of three others, dedicated herself to getting people through what she called 'the second phase of sorrow.' It is the only secret society of which I am a member. What do we do? We invite the bereaved person to our homes on nights which would probably be heartbreaking—on anniversaries or birthdays and, of course, at Christmas. We try to provide and encourage hobbies. In one case we helped to arrange the adoption of a child for a woman who had lost her baby.

"None of these people suspects what we are doing. Later, when they are better adjusted, we invite them to become members. So far we have 46—a chain that is constantly growing, linked by a common need to comfort and be comforted."

Holiday Hints

THE men who forecast the weather really do know something. In New York the employees of the weather bureau were asked to choose their holiday periods. They pulled out their charts, studied the weather conditions—then all asked for the same three weeks. —*Time*

COMEDIAN Fred Allen once offered these holiday ideas: a detachable blister for busy people who can't get away from their jobs to lie in the sun; a pair of hiking shoes with built-in pebbles for people who'd rather sit in hotels than go for long walks; and a self-wetting bathing suit to make others on the beach think you have been in the water on cold days.
—J. W.

* * *

Breakfast Serial

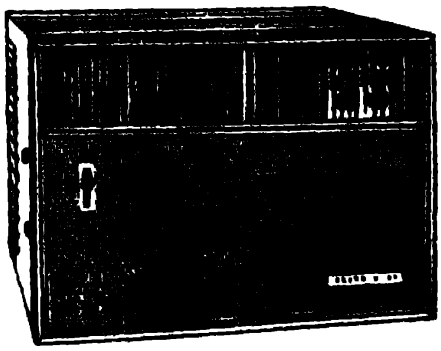
SIGN in a café: "Breakfast may be ordered at any hour of the day if you can affirm that you have just got up." —W. J.

A MAN staying at a hotel ordered croissants for breakfast and found there weren't any. "They smell so good when they come out of the oven," explained a head waiter, "that the staff eats them before they can get out of the kitchen." "Then why have them on the menu?" asked the man.

"Because," replied the waiter stiffly, "this hotel is *famous* for croissants!" —H. C.



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LIFE'S LIKE THAT

THRILLED by my first visit to New York, I was determined to try eating at the Automat. I chose the noon hour, an especially busy time. The crowd was large, and my sympathy was with a small girl patiently waiting to obtain change at a counter besieged by a hungry crowd. At last she received her money and worked her way back to her mother—who proceeded to reprimand her in a clearly audible stage whisper, "How many times do I have to tell you not to be polite in New York!" —MRS. LEROY SCHOTT

AFTER CALLING on a new friend, I parked in her driveway for a few parting words. Noticing a stately evergreen in her garden, I told her it was one of the most beautiful trees I had ever seen.

Some years ago, she confided, her marriage had been threatened by boredom and neglect. It was then that her husband had planted a young spruce. If the tree died, they decided, they would get a divorce, but if it grew they would stay together.

"You know," she said, "we caught each other watering that tree."

—MRS. E. J.

NOTICING how eagerly my teenage daughter fights down every obstacle in her path to answer the telephone on the first ring, I told her that in my day girls used to wait for the third or fourth ring so they wouldn't appear too anxious.

"Good Lord, Mum," she retorted. "That was before the age of status symbols. Do you want everyone to think I live in an underphoned home?" —R. Z.

ON HOLIDAY, I noticed that one of the young men in my party bought about a dozen postcards every day, and on each he wrote a long message before he posted it. I remarked to him one day how well he kept up with his friends. "Not exactly," he said, handing me several cards, which I saw were addressed to himself. "When I get home," he explained, "I'll have a complete record of the trip: my own reactions, plus the picture and the description printed on each card." —M. P.

HIS HAND clutching a toy, the small boy demanded with shrill persistence that his mother buy it for him. When she firmly repeated that he could not have it, he shouted, "Mummy, I never met a girl as mean as you!"

She looked at him thoughtfully. Then running her hand over his head, she said, "You will, sweetie, you *will*." —RUTH NORTHLICH

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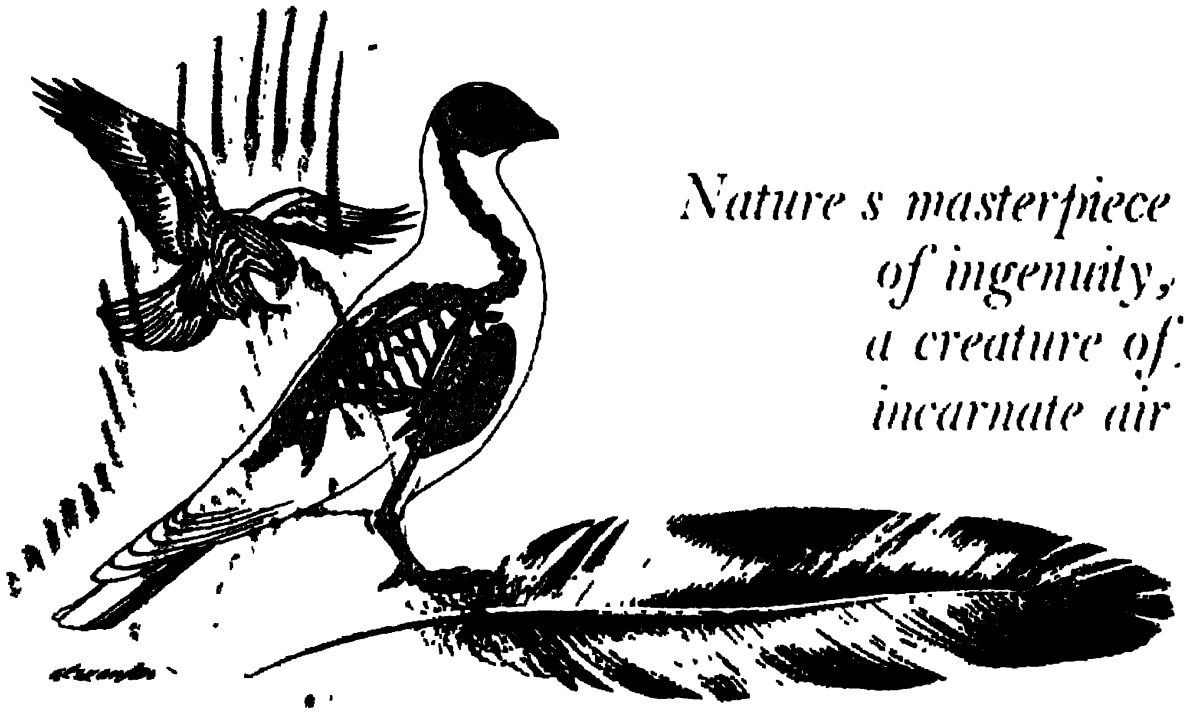
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The Miracle of Birds

By Alan Devoe

"A bird is to me as wonderful as the stars," said the famous ornithologist Elliott Coues. To learn something about that winged marvel is to make acquaintance with some of nature's most breathtaking miracles.

In the making of a bird, every step was taken with a single thought in mind: the thought of flight. Here was to be a creature of incarnate air, a "grace for the sky." Here were to be lightness, buoyancy, arrowing strength, a sight to lift man's spirit as if on wings itself.

A bird is "bird-brained" because it needs prodigious eyesight for flight. Because only a small part of a bird's eye is visible to us, we are not likely to realize what a gigantic organ it is. A bird's eyes are actually so big that there is barely room in its skull for them. Many hawks and owls have eyeballs bigger than yours and mine. These immense eyes force a bird's brain to be a relatively

Condensed from The American Mercury
This article first appeared in The Reader's Digest for November 1953

insignificant organ, squeezed to the rear of its skull. In many birds, the eyes weigh more than the brain. In some, each eye does. And for these eyes there is a third eyelid—to be drawn back and forth as a "windscreen wiper" as the bird rushes through the high sky.

Other marvels? An owl scans the dark woods with eyes ten times as sensitive to faint light as ours. A hawk may have vision so piercing that as it perches on a look-out tree it can see small prey more than a mile away. To extract grubs from trees, a woodpecker has a tongue so long it curves over inside its head and is rooted in front of its eyes. Many coastal birds have a built-in sense of time so precise that after inland trips they can return to shore for feeding at the hour when the tide is right. The commonest little finch in the shrubbery is such a fabulous quiver of life energy that its tiny heart races at 500 beats a minute. Some birds' body temperatures are as high as 110 degrees.

Ruskin was using only slight poetic license when he spoke of a bird as "but a drift of the air brought into shape by plumes." A bird inhales draughts of air more deeply than just into its lungs. A bird's lungs connect with as many as nine additional air sacs, some of which have elongations extending into the bones. A mammal bone is heavy, dense. A bird bone is hollow, filled with a spongy network engineered for air capacity. As a bird breathes, it is inflooded with air to its marrow.

Even the skull of a bird is designed to help this airy insubstantiality. Skull bones become lightweight plates and struts. To lighten the living flying machine at its "nose," nature took away birds' teeth—teeth need heavy jaws and muscles. For lightness aft, a bird's tail feathers are all borne on one short bone.

Feathers are the strongest structures for their size and weight known in nature. A feather may seem to be only a central shaft with projections on either side. It is much more. Each projection (called a vane) from the feather stem is composed of numbers of parallel rods, the barbs. A barb is itself virtually a complete miniature feather, with extremely fine side-projections called barbules. Look still closer with a lens and it is revealed that on these barbules are tinier barbicels, and on these are almost infinitesimal hooklets. The hooklets mesh the barbs; the whole vane is one light, perfect interweave. Barbules and barbicels on a single feather may number over a million.

To make its streamlined body a perfect flight machine, a bird's framework is the most rigid in the animal world. Vertebrae of its backbone are fused and united, to make an immensely strong axis. Backbone, ribs and breastbone form a "cage" of incomparable strength. The bird's ribs are lashed together

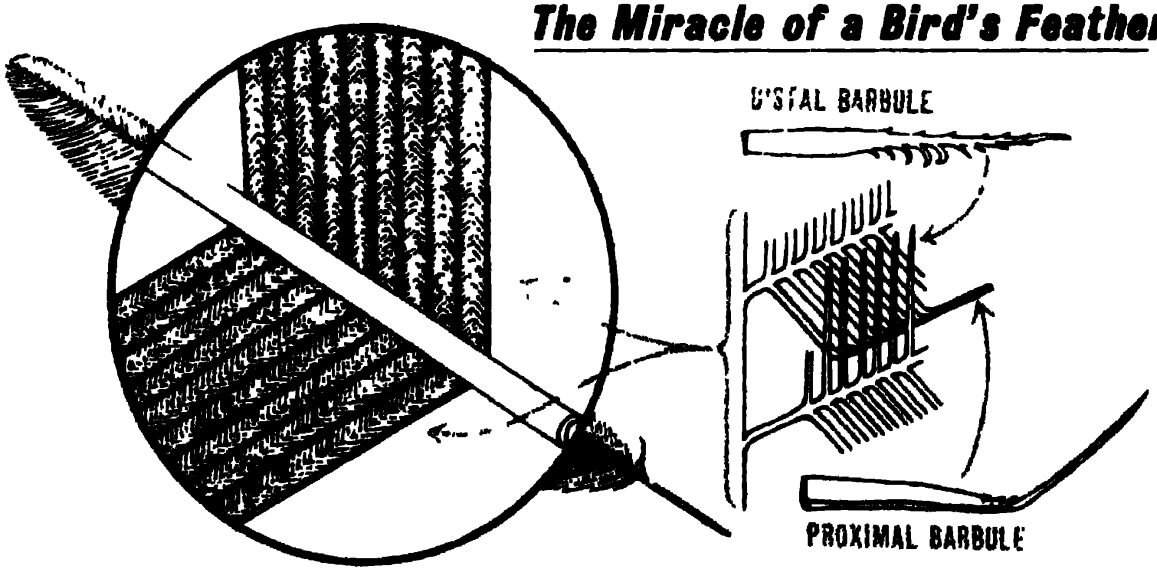
by tough ligaments, fastened to both its backbone and its breastbone. Its two powerful shoulder blades are braced together across the front by collarbones that fuse in its wishbone. Down the middle of this runs a tremendous ridge, for attachment of the great pectoral muscles that work its wings. In many birds these muscles constitute more than a quarter of the bird's whole weight.

As a bird beats its wings in downstroke, it may seem to be pushing itself forward as if rowing through the air. High-speed cameras show it isn't. A bird is a natural miniature aeroplane. On the downstroke, each wing moves forward, the inner half held almost rigid, its fore edge slightly sloped like a plane wing, its upper surface arched by a curve of feathers. The outer half of the wing moves separately, activated by the bird's "wrist," located about halfway along the wing's length. During wingbeat, the primary feathers at the bird's wing tips flare out almost at right angles to the wing, and become propellers. The inner half of the wing, curved and tilted, is meanwhile the plane wing providing steady lift. On landings and take-offs, the bird avoids stalls by means of special feathers at the front edge of its "wrist." It raises these to make a "slot" between them and its main wing, providing a perfect auxiliary aerofoil.

A bird's flight feats can be nearly incredible. A big Cooper's hawk is streaking in pursuit of a quail. Suddenly the quail, from a height of only five or six feet, drops like a stone to a clump of bushes. In the instant before its body can hit that shelter, the hawk shoots under it, turns upside down in full flight, catches the falling body, rights itself and zooms on without a second's slackening.

A sparrow-hawk, flying at top speed, saves itself from crashing

The Miracle of a Bird's Feather

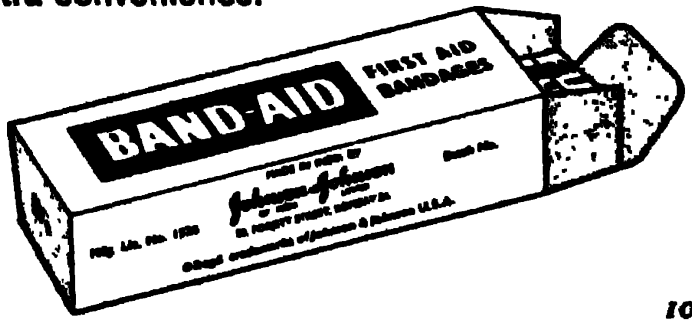


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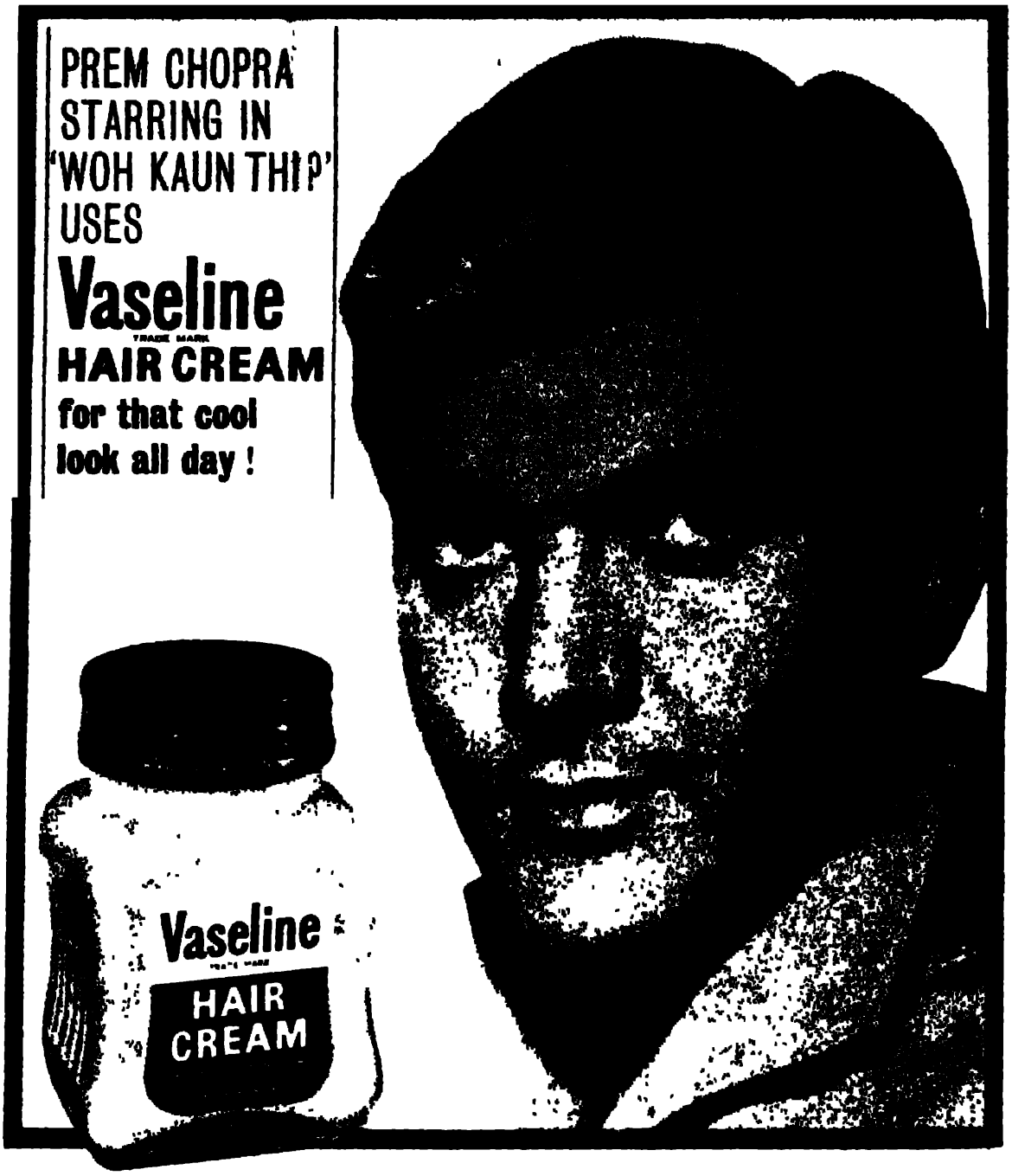


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A bird cushions its landing with its legs, which consist of three single rigid bones with joints that work in opposite directions. This is probably the most effective shock-absorbing mechanism in nature.

As a male bird utters his song, to claim territory and invite a mate to it, he uses an extraordinary vocal organ called a syrinx. In this song box is a bony band to which attach structures of outstretched membrane under control of intricate muscles that can exquisitely tighten or relax the valve as the ecstatic bird forces air from its lungs.

The songs of springtime lead into courtships stylized by instinct into some of nature's strangest and most touching rituals.

Even a common little nuthatch is possessed of unexpected grace in wooing. He selects choice sunflower seeds and flies to his female with them. If she persists unwon, he resorts to a further charm: he shucks each seed before presentation!

Courting lapwings hold a wing waving fiesta, cranes dance, a woodcock climbs the sky in a spiral while he "winnows" by letting air whistle through his outer primary feathers in an unforgettable love call.

Birds' nests are often so elaborate that it is almost impossible to believe such skill can be instinctive. But it is. Science has recently proved that for at least five generations the nest skill can survive in perfection independent of experience. Four generations of weaverbirds were bred under artificial conditions in which they never saw a nest or nest material. Then the fifth generation were set free. At once they began constructing with unerring skill the complex woven nests of their ancestors.

After baby birds, using a temporary "egg tooth" which nature provides, have tapped their way free of their shells, they become prodigies of almost unimaginable appetite. One infant robin eats as much as 14 feet of earthworms a day. A wren whose feeding trips to her youngsters were counted between sunrise and nightfall visited the nest 1,217 times. A young black tern, weighing 31 grammes, consumed daily 48 grammes of food. To survive, every bird must eat at least half its own weight in food each day.

By late summer bird families have been reared and the parents, withdrawing to deep woods, stilling their song, have moulted. Worn feathers are replaced in a change so delicately gradual that the first lost feather must be partially regrown before a second feather drops. The whole refeathering follows this

pattern, so that the bird's flight is never impaired. In the case of vivid birds—tanagers, buntings and the like—their bright summer dress is completely replaced by a travel suit of dull drab.

In autumn migration, the birds fly at heights ranging up to 5,000 feet or more above earth, and cover distances nearly beyond belief. A tiny blackpoll warbler, nesting in Canada, wings 4,000 miles to Brazil. A golden plover travels from the edge of the Arctic Ocean to the Argentine, almost 8,000 miles. Champion migrant is the Arctic tern, which summers at the north-polar land limit, winters in Antarctica. Its annual round trip: 22,000 miles.

How do they find their way? Naturalists have proved that birds can expertly calculate geography, and probably time, from sun slant. But there remains a mysterious "plus" in birds' pathfinding through the trackless skies, often at night. The whole miracle of bird life must remind us of what the great naturalist Waterton put into four words of simple eloquence: "We can but bow."

Widow's Pique

IN THE theatre at Stratford-upon-Avon, I sat next to a bright-eyed woman of 60 or so, one of a busload of lady travellers from the United States.

"I've known these girls all my life, grew up with them back home," she explained during the interval. "They've all lost their husbands—call themselves the Merry Widows. Every year they take a long trip together." She let out a great sigh of pleasure.

"I've so much wanted to join their club," she resumed. "But I just wasn't eligible until this spring." —Contributed by Bob de Lany

Food for Thought

A TABLE labelled "Desirable Weights for Women" was posted on a hospital notice-board, provoking groans from the heavier members of the staff. But the scowls changed to grins a few days later when a new list was put up beside the old one. Adding 10 to 15 pounds in each height category, it was labelled: "Weights for Desirable Women." —S. M.

AT A well-patronized restaurant they never draw a line through the menu items that are sold out. Instead they use a rubber stamp saying: "This was too good!" —*McCall's*

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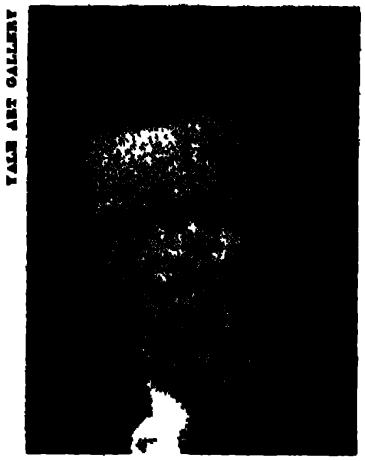
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Edward Hicks, painted by his cousin Thomas



America's Greatest Primitive Painter

From the brush of Edward Hicks, a humble sign-painter, came jewels of folk art

By Malcolm Vaughan



In his lifetime, people who thought they knew art smiled at Edward Hicks's pictures. Before he died in 1849, he deemed himself lucky to sell a few paintings for as much as 100 dollars. Today they fetch up to 10,000 dollars apiece. Their sincerity and simple directness make them masterpieces of folk art. Their decorative colour-patterning may be likened to Persian painting, and their

NEW YORK STATE HISTORICAL ASSOCIATION, COOPERSTOWN, NEW YORK



One of Hicks's famous visions of the Peaceable Kingdom. On the left is a vignette of William Penn's treaty with the Indians

freedom from academic routine compared to the naïve-seeming expressions of William Blake, the nineteenth-century English poet.

Like Blake, Hicks believed in peace—"And the lion shall lie down with the lamb"—total peace. As a devoted Quaker, his heart was filled with love, his life with friends. He trusted in the Bible, and firmly cherished the scriptural prediction that a peaceable kingdom will arrive.

A village coach and carriage painter, he eked out a living by painting signs, houses, milk buckets, or by ornamenting chimney boards. He'd paint your barn or your furniture, anything, to pick up an honest dollar. At 31, he started spreading the gospel as a Quaker minister. He made the rounds on horseback, and where there was no meetinghouse available preached in the schoolhouse. To do it he had to take on more odd jobs, because he insisted on paying his own pastoral expenses.

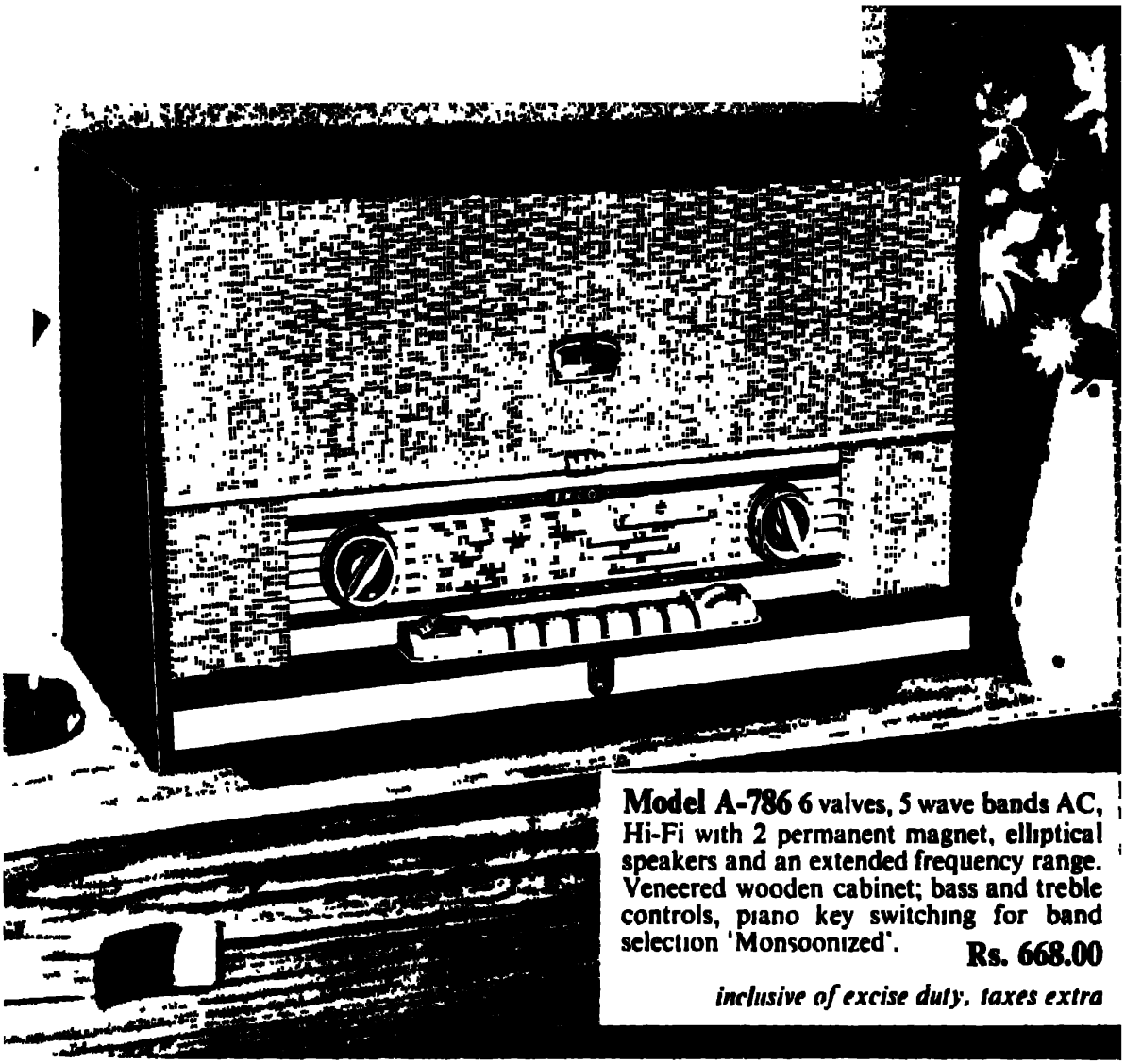
In middle age, for the pleasure of it, Hicks turned to picture-painting. He began with a Peaceable Kingdom scene—a wolf, a lamb, a leopard and a little billy goat sprawled happily together in a meadow, while a child with its arm around a lion's neck stands by, ready to lead them in peace. Later he ventured into other subjects—farm scenes, Niagara Falls and William Penn's treaty with the Indians. But always his favourite theme was "the lion shall lie down with the lamb." He painted more than 80 pictures of the Peaceable Kingdom, each different yet each showing the animals doing what is foretold in Isaiah 11:6–9.

Because Hicks ground and mixed his own colours, his paintings have stood up well across the years. A country artisan with neither time nor money for instructors, he taught himself oil painting. A few of his pictures are painted from nature. Sometimes he turned his back on a scene and painted from memory, or borrowed bits from others' illustrations—this tree, that field, this child, that lion—and worked them into his own composition.

The sweet innocence in Hicks's pictures is the very reflection of his spirit. To possess the perfect faith of a child was, he believed, the key to Christian faith, the passport to heaven. "I would not part with this childlike belief," he wrote, "for ten thousand times ten thousand worlds."

Of medium height, slender, energetic, with a broken nose that accentuated his manly air, Hicks devoted his life to serving others. His warmth of heart set people aglow. When he spoke, his clear, strong voice electrified his listeners.

MALCOLM VAUGHAN, a widely known art critic, was for years American editor of *The Connoisseur*, a British publication dealing with arts and antiques. This was the last of many articles on famous painters that he wrote for The Reader's Digest before his death some months ago.



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"Falls of Niagara" -- painted from memory, years after an 1819 visit. Tiny human figures suggest Hicks's belief that God's greatness dwarfs man

When he preached, he swept his hearers along, often melting many to tears. The cheerfulness with which he bore poverty and the other harsh circumstances of his life made him an example to all around him. He entered deeply into so many lives that his village of 1,000 inhabitants was astounded when 4,000 people came to his funeral.

Born in 1780, harsh circumstance began early for Edward Hicks. His mother died when he was an infant, and his father fell into bankruptcy. From the age of three to 13 he was boarded out to a farmer, a strict taskmaster. But the farmer's wife was motherly, kind and patient. When her day's work was done, she taught him his letters and his morals, reading the Bible aloud by the fireside while he stood at her knee. Hicks

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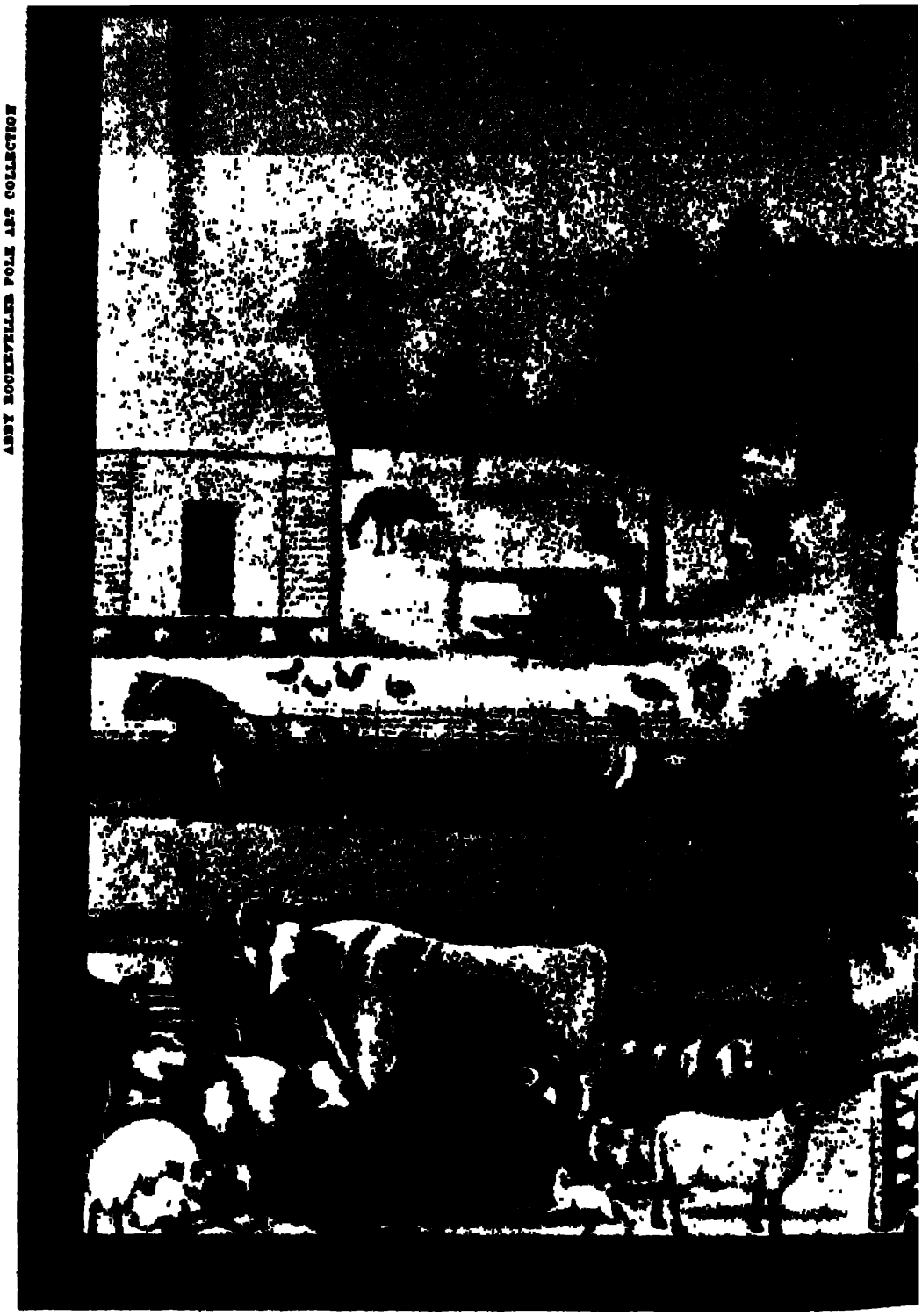


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"The Residence of David Twining, 1787"—where Hicks was apprenticed as a boy. At lower right, he is learning his letters from the Bible



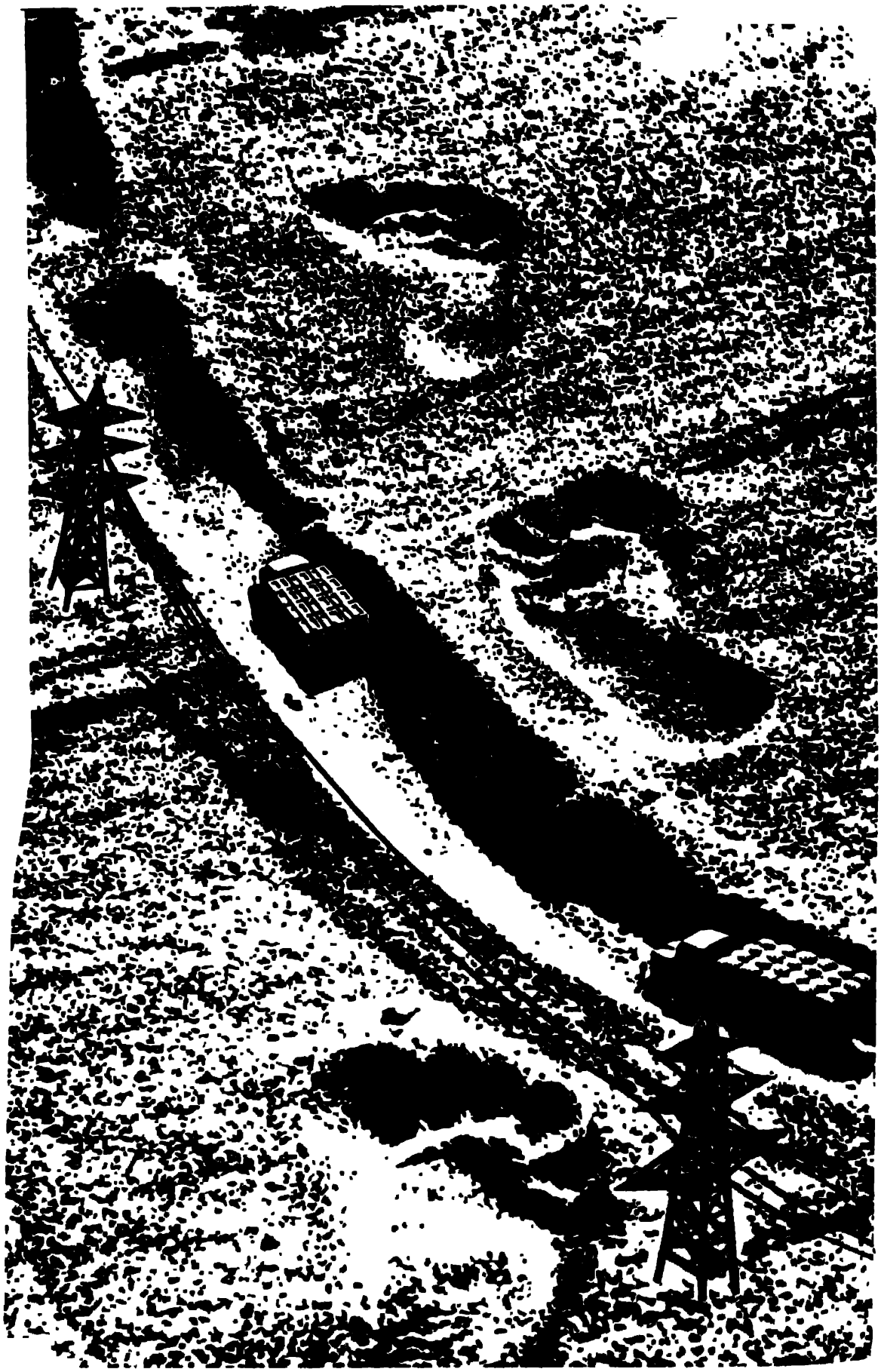
likened her to the virtuous woman in Proverbs: *"She worketh willingly with her hands . . . Riseth also while it is yet night . . . Strength and honour are her clothing . . . In her tongue is the law of kindness . . . She looketh well to the ways of her household, and eateth not the bread of idleness."*

Late in life, remembering only the happiness of a rustic boyhood, Hicks painted his foster father's farmyard in a vivid and charming domestic scene. Complete with the farmer's family, and all the farm animals, it makes a peaceable little kingdom of its own.

Because it was not "useful," Quaker Hicks looked upon his picture-painting as "vain daubing." At one time he even tried to turn away from his trade of carriage painting because it did not seem a big enough service to humanity. But then he only fell deeper in debt, and nearly lost his health.

Most artists reach their peak in middle age. When Hicks passed middle age his paintings got better and better, and sales improved, too. The sign and carriage painting also prospered. But he never dreamed of fame. He still believed in total peace —to serve, to help other people, was all he wanted.

Perhaps it is because of the spirit behind this simple dedication, shining through, that many art critics now acclaim Edward Hicks as the greatest primitive painter America has ever produced.



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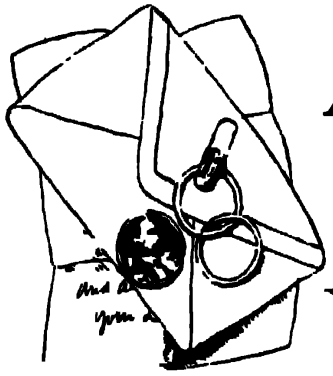
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After the Wedding

The story of two young people and a pair of apron strings

By Hugh Cave

At the last minute, Don's mother seized their hands. "Elaine, you look lovely. Just lovely." And then to both of them: "Now don't drive too fast. It's Saturday and traffic will be heavy."

"All right, Mum," Don said.

Mrs. Grant released them, and again the tears came. With sudden compassion Elaine kissed her thin, pale cheek. "Don't worry about us, Mother Grant," she whispered.

Then they were flying down the path to the car through a storm of sound and colour made up of bridesmaids, ushers, wedding guests, good-byes and good wishes. In the car, they were moving at last, from the daylong excitement into a wonderful calm in which the wedding, the reception—yes, even the sad, lost look on Don's mother's face—were beginning to blur.

"Hallo, Mrs. Grant," Don said softly.

"Hi," she said, thinking *Hallo, My Husband.*

They turned a corner, and Don stopped the car to remove the clattering string of tin cans tied on behind. She got out with him and wiped the "Just Married" off the rear window. An old man strolling by said "Congratulations!" and went on, smiling at some memory of his own.

Back in the car, Don took her into

Condensed from Good Housekeeping

his arms. "I love you, Mrs. Grant," he murmured. "'Mrs. Grant.' Mm."

"And *Mrs.* Grant loves *Mr.* Grant," she said. "But they have a long way to go, sir."

He glanced at her in silence. They had argued a little about where they would spend their honeymoon. The hotel his mother had suggested was nearly 200 miles away, too long a drive after a wedding. But Don had favoured it. "You know Mum when she has her heart set on something," he had said.

Yes, I know, she thought. Her widowed mother-in-law was going to be a problem. Independent, a businesswoman, she was still the kind who would telephone often; who would be hurt if her son failed to visit her every few days; who would expect him to be, as he had been, her confidant, her son always.

And Don? Elaine glanced at the gentle, quiet man to whom she had been married now for almost four hours. She was not sure. When her own wishes were matched against his mother's he had not always put his mother first. Yet now they were on the way to the lakeside hotel where they had booked—the hotel where Don's mother and father had honeymooned 28 years ago.

Her husband was frowning. "Peculiar noise. Hear it?" he asked. "You don't suppose old best-man Charlie would load the hubcaps?" He slowed down. "There! Hear it now? It's one of the rear wheels."

She heard it: a sound like pebbles in a shaken tin can.

They drove on slowly. A light rain started falling—it was heavy by the time Don found a place to pull off the road. She heard him prise off the hubcaps. When he slid back on to the car seat he solemnly held out a handful of stones, and they laughed about it together. "But we've lost a lot of time," he said.

Elaine bit her lip. *We won't be there until after midnight,* she thought.

But he knew a shortcut, or said he did. Leaving the main road, he turned along a narrow lane, and off that into a climbing driveway. He stopped the car in front of a long white veranda above the sea.

Bewildered, she looked at his face and saw a grin there. "Mr. and Mrs. Grant have a booking for supper here," he said. "It's all arranged."

"Don," she protested, "we haven't time!"

Once inside, she stopped worrying. The old-fashioned dining-room was serene and lovely, a haven from the rain and from hurry. And they did need a break from the long drive—a chance to look quietly at each other, realize they were man and wife.

There was a difference, she thought, between bride and groom and man and wife. Even the coupling of the words signified a difference. A wedding was a woman's affair. Bride and groom, in that



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order. But marriage . . . no one ever said "wife and man."

"Do you like it here, darling?" Don asked, as they finished a perfect dinner.

"It's wonderful. I wish we could stay."

"That's what I hoped you'd say. We *are* staying."

"Here?" Her heart leaped. "But we're expected at——"

His hand reached for hers. "Mother was telling me last week how much the memory of her honeymoon meant to her. I began thinking—ours would be a big thing with us, too, but not if part of it was hand-me-down. It had to be *all* ours." Rising, he drew her to her feet. "Come on, Mrs. Grant. This is where we're staying."

Next morning Don pulled an envelope out of his pocket. "Oh," he said. "I forgot this. It was taped to the inside of that hubcap."

The envelope contained a bright new penny, a vitamin capsule and two tiny silver rings, inseparably linked, with Don's name engraved on one and hers on the other. And in his mother's neat handwriting there was a poem.

To Elaine and Don

So you'll always have Wealth
And the best of Health
And always be sure
Your Love will endure.

"Well, I'll be darned," Don said. "She must have asked Charlie to put this in when he tossed in the stones. Leave it to Mum to want the last word."

Elaine, holding the two silver rings, was looking at the poem—the *title* of the poem . . .

"Hey," Don said, taking her in his arms. "What are you crying for?"

She could not help it. His mother could so easily have written "To Don and Elaine" instead of "To Elaine and Don"—if she had written the words without thinking.

Printers Bedevilled

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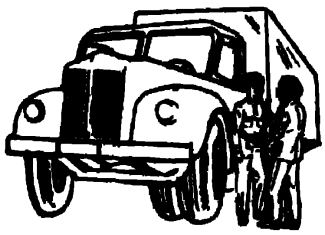
—Radio programme announcement in the Los Angeles *Times*

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So You Don't Use

By Stella King

In an air age where no one objects to fastening his seat belt in a plane, people have been slow to apply the same kind of protection in their cars. Says Britain's Royal Society for the Prevention of Accidents, "The evidence available proves beyond question that seat belts are a safety investment for every driver and a 'must' for the front-seat passenger."

Why don't more people use them? From a number of surveys, here are the alibis most often cited —and the reasons why these alibis are wrong.

Fear of being trapped in a burning or submerged car. This type of mishap is the least likely to happen: in an analysis of 10,000 injury-producing accidents in America, Cornell University's Automotive Crash Injury Research team found that fire was involved in only 0·2 per cent of the cases; submersion in only 0·3 per cent. Even when such an accident does occur, you are far safer *with* a seat belt, because it can keep you from being knocked unconscious or otherwise injured and so left unable to extricate yourself. And the belt is designed for easy, immediate release by the passenger or rescuer.

Fear of being trapped in a crashed car. Undeniably, there are cases where people who were thrown clear on impact survived a crash in which they might have been mortally crushed if they had remained in the car. But they had exceptionally lucky landings.

According to William Gissane, Professor of Accident Surgery and Director of Britain's Road Injuries Research Group, ejection is a major cause of serious injury to car-crash victims. Statistics from thousands

Adapted from an article by Paul Kearney in Family Safety

Seat Belts?

As a matter of life and death, these safety devices cannot be ignored

of such cases in America show that chances of fatal injury are five times greater if people are ejected than if they remain in the car. The most effective method of preventing ejection is to use a seat belt.

Belief that belts are unnecessary in low-speed local driving. From studies of injury-producing accidents and police reports from all over the country, the British Road Research Laboratory has estimated that two accidents out of three occur in built-up areas where speeds are restricted to 40 m.p.h. or less. Most accidents happen within 25 miles of the victim's home.

In an investigation of 600 accidents, injuries to drivers wearing seat belts were 51 per cent below the figure for those who were not. Another survey found that serious injuries were reduced by 67 per cent, slight injuries by 33 per cent and all injuries by 44 per cent if victims were wearing seat belts.

Belief that belts would be useless in a high-speed accident. No seat belt or other restraining device can be a cure-all. This protection is designed for the *survivable* accidents, which according to one authority account for almost half of traffic casualties.

Even so, there have been many cases where seat belts have saved wearers in what are considered *non*-survivable accidents, like head-on collisions at 70 m.p.h. In identical cars, involved in identical impact crashes, it was found that the driver and passenger in one vehicle were both seriously injured. Neither wore seat belts. In the other car two people sitting in the same seats, but wearing belts, escaped with slight cuts.

A study of 500 fatal accidents showed that most deaths were caused by damage to the head. Belts

reduce this risk by helping to prevent impact with the windscreen.

Belief that belts restrict freedom of movement in the car. The comfort provided by a snug-fitting belt greatly outweighs any fancied physical restraint. Not until you've worn one can you appreciate the freedom from sliding on the seat in sharp turns, bouncing up and down on harsh bumps, or hurtling forward at unexpected stops. On long runs there is far less stiffness and fatigue.

Many county police forces in Britain have seat belts fitted to traffic patrol cars. Senior patrolmen whose working days are spent at the wheel find that the comfort bonus makes a seat belt worthwhile, quite apart from safety considerations. The War Office is planning to fit more than 50,000 army cars all over the world with seat belts for drivers and passengers. They are buying no new vehicles without belts fitted.

The fact is—as thousands of case histories demonstrate—that all the lame alibis for avoiding seat belts are eclipsed by the positive reasons for installing– and using—them.

Rhyme and Reason

It is not wisdom to be only wise,
And on the inward vision close the eyes,
But it is wisdom to believe the heart.
Columbus found a world and had no chart.

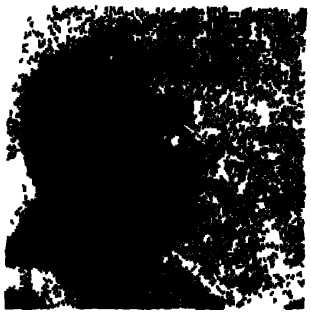
—George Santayana, *Poems* (Constable, London)

Praise youth for pulling things apart,
  Toppling the idols, breaking leases;
Then from the upset apple-cart
  Praise oldsters picking up the pieces.

—Phyllis McGinley, *Times Three*, © 1951 by Phyllis McGinley (Secker & Warburg, London)

Beyond Hope

A LOCAL cinema revived that old classic, "The Road to Utopia," in which Bob Hope and Bing Crosby do a lot of clowning about, stealing scenes from each other when they can, or ruining them when they can't. Apparently, this horseplay is lost on a serious younger generation. At one point in the picture, Crosby is doing a romantic moonlight scene with Dorothy Lamour when Hope thrusts his head into view and hisses, "Now is the time to get your popcorn, kids." It was supposed to get a big laugh. Instead, all the children got up and filed out into the foyer to the popcorn machine. —P. C.



Dick Pope

His big ideas and dynamic personality converted a Florida swamp into a fabulous mecca for tourists

Super Showman of the Water Gardens

By William Furlong

In the past 25 years he has done more for the well-filled bathing suit than the built-in bra; he has converted a fetid swamp in central Florida into a shrine for tourists, left the impression that if he did not conceive water-skiing he at least gave it legitimacy; and he has provided a constant and buoyant irritant for his bitter rival, the state of California.

"I just *love* your state," he once told California-based Conrad Hilton, the hotel man. "I bought my first and only overcoat there."

Condensed from Sports Illustrated

PHOTOGRAPHS ON THIS PAGE: LYNN PELHAM



The Aquamaids perform on Lake Eloise

All this—the work of the most insistent, irrepressible and thoroughly outrageous promoter in sports and tourism today, 63-year-old Dick Pope—has helped to make Cypress Gardens, a 164-acre botanical sunburst near Winter Haven in central Florida, into America's most implausibly successful attraction. Built in a swamp some four miles from the nearest main highway, it now lures more than a million visitors a year. According to Pope (who can be believed about as much as circus impresario P. T. Barnum could), Cypress Gardens ranks along with the Grand Canyon as the most photogenic sight in America. The difference is that the canyon was built by God and nature, while Cypress Gardens was developed, virtually in defiance of nature, by man alone.

In promoting Cypress Gardens, Dick Pope has applied his gaudy talents as relentlessly as the driving rods on an engine. Once, only a government order restrained him from throwing a million gardenias off the top of New York's Empire State Building. He plugs Cypress Gardens on everything from place mats and menu covers in restaurants to jigsaw puzzles and the covers of record albums. He has sent out a million publicity photographs, keeps seven full-time photographers on his staff, and claims to have spent 385,000 dollars on their activities last year (compared with 280,000 dollars for maintaining the gardens).

When you consider that he is trying to publicize a garden, most of his photographs are triumphant irrelevancies. He once arranged 27,838 grapefruit around one bathing beauty to get one photograph of Cypress Gardens. Few picture editors, he insists, are interested in photographs of flowers, but practically all are interested in pictures of girls in bathing suits. The result is that plugs for Cypress Gardens have been on the covers of some 300 magazines, and one of his pictures appeared in 3,670 different publications all over the world.

Pope has always been vaguely dissatisfied merely with getting free publicity. He feels that people ought to *pay* him to plug his product. Curiously enough, some people do. Businesses and advertising agencies rent some of the more exotic space in Cypress Gardens to make commercials for their products. The usual location fee is 250 dollars a day—and a plug in the advertisement. "We pay Dick Pope," says one advertising agency, "50,000 dollars a year for the privilege of publicizing his own place."

With a crafty appreciation of the tourist's unbridled passion for being exploited, Pope charges adults two dollars apiece to enter Cypress Gardens (small children get in free), then enlists them as unwitting agents. While they wander about inside, riding electric boats through the canals, buying film to take pictures of Cypress Gardens and

Write
with
elman's
and right
you are!

buying Cypress Garden souvenirs, Cypress Garden stickers are being pasted on the bumpers of their parked cars.

To provide picture material, Pope scatters girls in nineteenth-century hoopskirts among picture-postcard scenes throughout the gardens. He runs his famous water show in one direction in the morning and in the opposite direction in the afternoon, so that nobody will have to shoot into the sun. He assigns a photographic director to guide the amateur photographer: "Ektachrome X or Kodacolor X with ASA of 64, shoot 1/100 or 1/125 at f/8 . . . A cloud is coming over, so go down one step on the light . . . Here come the showboats—all right, movies, r-r-roll 'em!" The idea, of course, is that when the amateur photographer cuts and splices his films or selects his best stills, he will discard his under-exposed or over-exposed shots of other attractions. But those that reflect the high triumph of his art—the pictures he took at Cypress Gardens—he will show over and over again to whatever captive audiences he can lure to his home. "It's the cheapest advertising in the world," says Pope.

When Pope started the gardens, he knew so little about flowers that he could not spell azalea. "Call it flame vine instead," he advised a secretary. Today he is as expert on more than 4,000 species of plants and flowers in the gardens as any of his

One of Cypress Gardens' outstanding beauty spots: Mirror Lagoon





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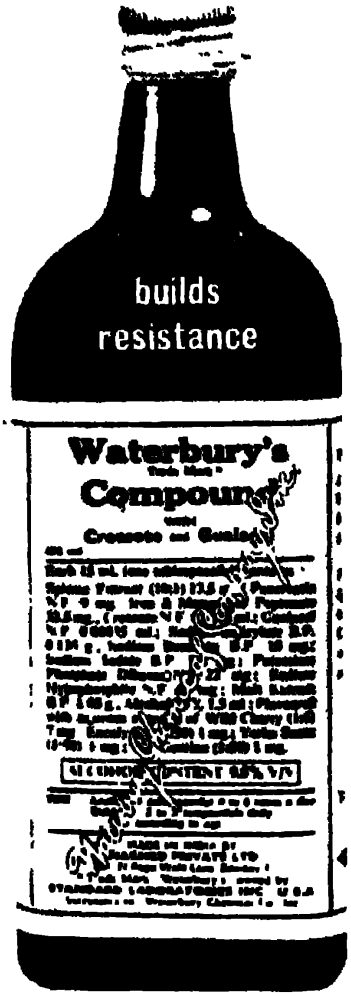
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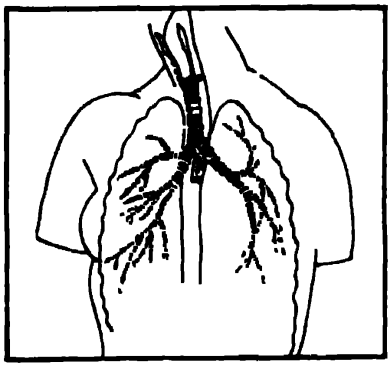






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37 gardeners. "All we've got here is a two-hour attraction where people can come and get drunk with beauty," he says. To protect it, he has built an oil-heating system that prevents the flowers from being destroyed during a frost.

Visitors to Cypress Gardens are rarely prepared for the vista of Pope himself as he strides about the gardens, a sartorial symphony in lemon slacks, lemon sports shirt and lemon sports jacket. When he spots a customer, the *bonhomie* bubbles to the surface like warm wine. "Do you mind," asked one tourist, "if we just sort of 'steal' a cutting to take home with us?" Pope beams with all the friendliness of a junior executive on good behaviour at a high-level party. "Not at all," he says. "How do you think *I* got them?"

For all his pleasant mummery, Dick Pope has a substance that goes beyond press-agentry. He insists that the heart of great promotion is giving the customer full value for his money. "You can cut a man's hair many times," says Pope, "but you can scalp him only once." His intent is to offer visitors a concentration of what nature has spread all over the world. There is little doubt that Cypress Gardens has succeeded in concentrating botanical beauty in a way that is the envy of proprietors of most other man-made gardens.

Pope was a real-estate salesman in Winter Haven until the Florida real-estate crash in the middle 1920's turned him into an ex-salesman. Hearing that Johnson Motors was about to embark on a publicity campaign on behalf of its outboard motors, Pope started driving north to Waukegan, Illinois, stopping at every large city to send a telegram to the company president: "Hold all publicity plans until I get there. Your problem is solved." He landed the job, at 12,000 dollars a year. Later he moved to New York to handle publicity for a number of clients.

In the Depression year of 1931, when publicity men were a luxury, Pope moved back to Florida. Remembering having read about a millionaire in Charleston, South Carolina, who charged two dollars a head to let about 18,000 people look at the gardens on his estate, he decided to develop a garden of his own. But he had to have an angle. He would build the garden as a public park, put in canals among the plants and flowers—"make a real Venice out of the place."

Pope persuaded the Winter Haven Canal Commission, which had been building channels connecting many of the 97 lakes within five miles of the town, to put up 2,100 dollars to help build his gardens along the swampy shores of Lake Eloise. Not long after work started, however, an enormous scepticism arose in Winter Haven. The Canal Commission demanded its money back. Pope paid it, engaged 40 men at a dollar a day each, and started building the gardens as a private

project. He added 48 acres along the lake by giving John Snively, who owned it, ten per cent of the operation. Pope and his family now control the remaining 90 per cent.

Three years passed before the gardens were ready to open to tourists. To get customers Pope had to overcome certain handicaps. The area had neither the ocean nor the Gulf of Mexico to provide cool breezes and wide, sweeping beaches. It had no night life. And because it was far from coastal highways, it was inordinately easy to pass by. So Dick Pope undertook his frantic publicity campaign.

He was helped by a certain serendipity. When the "flame vines" near the entrance were blown down by a storm, Dick's wife, Julie, dressed a couple of the secretaries in hoopskirts and stationed them out in front where they could greet the tourists—and manoeuvre their skirts to conceal the fallen flowers. "And that's how the girls in the old-fashioned dresses started," says Dick.

The water show developed just as accidentally. During the Second World War, while Dick was in the army, a bus-load of soldiers pulled up at Cypress Gardens. "When does the show start?" asked one. There *was* no show, but Julie Pope was equal to the challenge. "A little after three o'clock," she said. Then she sent a secretary rushing to the Winter Haven Secondary School to round up Dick, jun., and some of his friends. When class ended, the kids, all water-ski fanatics, improvised a water-ski "show," and it has been featured ever since. Today Pope runs the show as briskly as a drill-master—15 acts in 30 minutes. He makes sure that the carefully rehearsed falls take place where the amateur photographers can get the best shots.

Pope has played host to a number of water-ski tournaments to encourage the notion that water-skiing *means* Cypress Gardens. At present, Cypress Gardens skiers hold five national and international titles and records.

Championships do not inevitably attract additional tourists, however. To expand the market, Pope decided to keep the gardens open all the year round, and now he does about as much business in the "off season" as in the winter.

It is during the winter that he pays particular attention to the weather. He can be made joyous by news of a zero-degree day in New York or abysmally unhappy by cold weather in Florida. And frequently he can be heard humming, "I'm dreaming of a white Christmas—for the folks in California."

NOTHING, with the possible exception of a fire or the whistle to stop work, can break up a discussion as quickly as a fellow who actually knows what he's talking about. —Roy Brenner



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The Power of the Positive "No!"

A distinguished clergyman puts the case for the absolute negative

By Norman Vincent Peale

Author of "The Power of Positive Thinking," "Adventures in the Holy Land," etc.

I am frequently approached by people who are deeply troubled about the times in which we live. What is happening to our moral standards? they ask me. Why is there so much crime and dishonesty among us? Why are children so difficult nowadays?

No man has the final answer to these questions. I do know one thing that is wrong, however. We have misplaced one of the most important words in our language. It is a short word, but a tremendous one. That word is "No!"

All my life I have preached and written about the value of positive thinking. And I still believe that affirmative attitudes are supremely important in successful living. But affirmatives alone are not enough. This world is full of hope and joy, but it is also beset by evil, immorality and sin. You can't say "Yes" to these things, or even "Perhaps." You have to say "No!"—and you have to make it stick.

In too many areas of living this is precisely what we are *not* doing. As parents, we shrink from the word for fear of displeasing our children. As electors, we support politicians who promise us special favours, instead of crying "No!"

Condensed from Guideposts

and throwing the rascals out. As buyers of entertainment, we condone standards so depraved that even the communists are revolted by them.

These are things our ancestors did not do. They believed in the reality of sin, and in man's capacity and obligation—with the help of God—to root it out of his life. They said no to fear, no to softness, no to decadence—NO!

This capacity for a ringing negative is something we must regain. I think there are three critical areas in which we can achieve this.

First, we must learn to say no to our children. The ironic fact is that they often *want* us to say no. They are confused by weak compromises. They want desperately to hitch their allegiance to something solid. They may seem cocky and assured on the surface, but when it comes to fundamental questions of morals or behaviour, they don't trust their own judgement.

Do you think that the socially-prominent American teenagers who wrecked a Long Island home after a party last September were really happy about it? I don't. I think that even as they went on their senseless rampage they were hoping that someone in authority would step in and say "No!" And I imagine that the youngsters were so unaccustomed to hearing a positive no that they didn't know how to apply one to themselves.

There is the key point: if we are going to raise a tougher, hardier breed to survive in this tooth-and-claw atomic world, we parents must learn to utter a positive no more often. "No, I won't drive you over to Susie's—ride your bike!" "No, you can't watch television—read a book!"

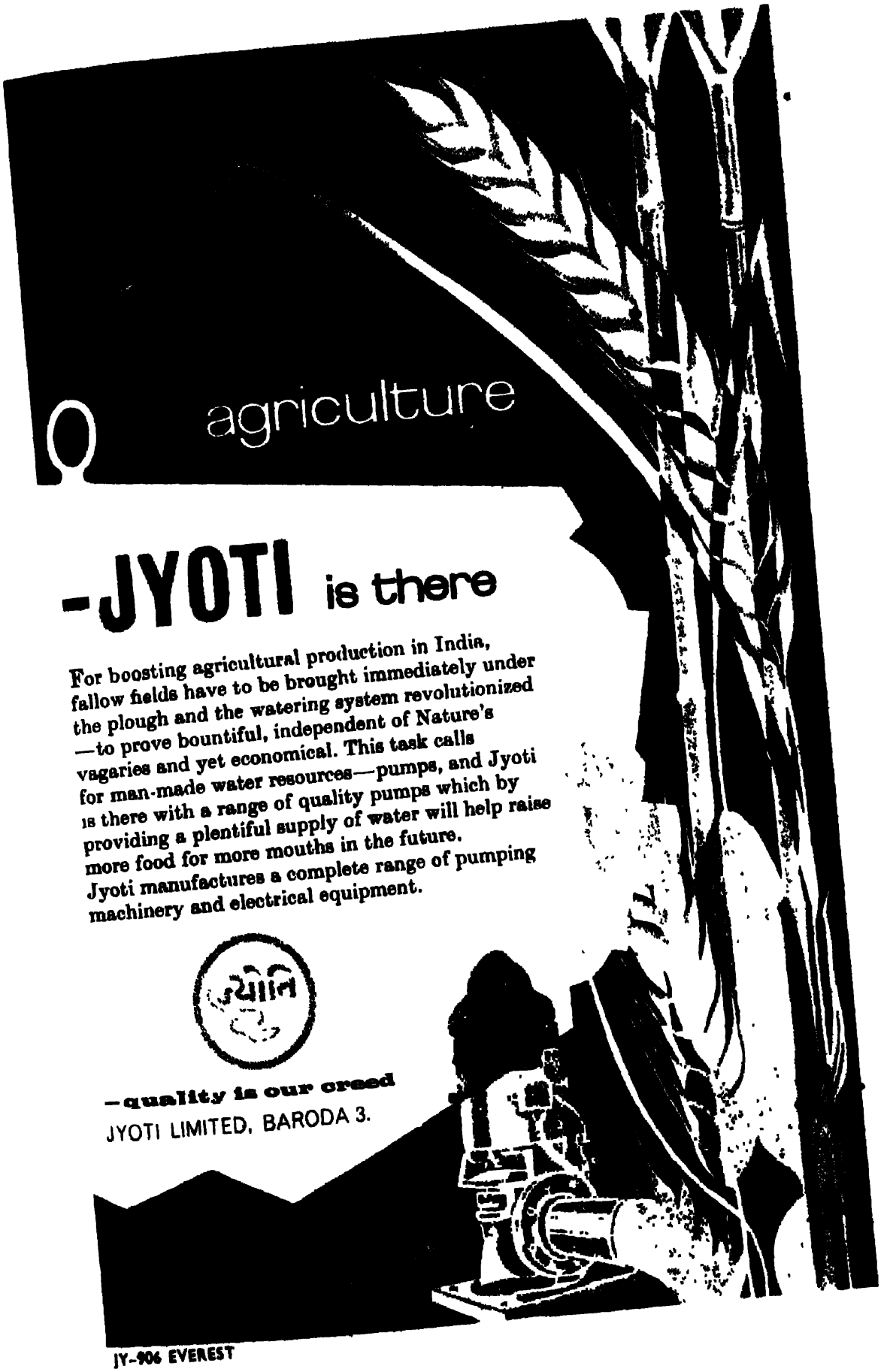
If this makes life a bit more difficult for our youngsters, so much the better. One of the great problems of our age is how to counteract the effects on the next generation of a civilization dedicated to the pursuit of luxury and the avoidance of effort.

A hundred years ago there was fire-wood to be chopped; there was water to be carried; there were animals to be fed. Not any more. We are in danger of robbing our children of what may be their greatest heritage—the heritage of struggle.

The second area where we must regain the capacity to say no is in the society in which we live. If we see something going wrong, we must speak out against it.

Not long ago, late at night, an executive I know phoned me. He had been walking the streets for hours, he said, wrestling with a problem Could he see me?

He came. I have rarely seen a man more upset. His problem concerned the discovery that one of his star salesmen had been heavily padding his expense accounts. But when my friend reprimanded the culprit, the man defied him. He admitted



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Early one morning in a Kathiawar village, a man lies hidden near a well. It is time for the women to draw water and, as they arrive, they are politely guided by him into a cave at the point of a gun. There the man, Mhowa Sadhwani, quietly relieves them of all their jewellery, pleading with them all the while to tell their husbands that they had been treated with the utmost courtesy !

The wily Mhowa lived and operated in the last century in the Kathiawar region of Saurashtra. Many fruitless attempts were made by the government to capture him. At last a reward of Rs. 5,000 was announced. Tiring of his risky life, the cheeky outlaw arranged his "capture" through an "informer", who duly received the reward. At the case instituted against him, Mhowa engaged a leading lawyer whose substantial daily fee was met out of the reward! In all, Mhowa had to spend Rs. 3,000 to secure an acquittal, leaving him with a clear Rs. 2,000 with which to start a lawful life.

The many deeds of Mhowa Sadhwani are today familiar legends in Saurashtra. To hear the legends and myths of our country is one of the pleasures of motoring. And you discover so much more when you go by road.

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padding his expenses, but he said that everyone did it.

"I've been trying to convince myself," my friend said wearily, "that if I myself don't cheat, I can afford to look the other way where this fellow is concerned."

"Bill," I said, "your career is based on self-confidence and self-respect. Tennyson said, 'Self-reverence, self-knowledge, self-control, These three alone lead life to sovereign power.' What's going to happen to your self-respect if you condone wrongdoing in your department?"

"You mean," he said glumly, "I should dismiss the man?"

"Not this time," I said. "He'd just cheat somewhere else. Call him in again, tell him that his dishonesty is making you dishonest, and that you won't stand for it. Tell him that if he pads one more expense account, you will fire him immediately. Give him an absolute no, and stick to it."

My friend did this, and just the other day he told me that the salesman not only accepted his ultimatum but eventually came back and thanked him for making him say no to his own dishonesty.

The third area where we must rediscover the value of the positive no is in the conduct of our own lives. The morality of a nation is nothing more than the sum of the moralities of its individual citizens. It is time to stop rationalizing about wrongdoing, excusing it (as the salesman did) on the grounds that "everybody is doing it." We must say no to temptation.

But it must be a *positive* no! In my 37 years as a minister I have seen hundreds of cases where a hesitant no ultimately led to disaster. Recently a young girl came to see me, lonely and unhappy. Her father, she said, was in prison for embezzlement. Her mother had had to find a job. Her home was haunted by bitterness and insecurity. The girl still loved her father. She wanted to know if I thought he was a wicked man beyond all forgiveness.

From what she told me, it was evident that her father had been tempted to embezzle funds mainly to keep up with his wife's insatiable demands for "the good life." I told the girl that, in my opinion, her father was not a wicked man but a weak one. I was sure that when the thought of "borrowing" company funds first crossed his mind, he rejected it. But his no was not a positive one. Temptation returned. In the end he destroyed his family's happiness, partly because he could not say no to the temptation to steal, but mainly because he could not say no to his demanding wife.

A good way to learn how to say no to the major temptations of life is to practise saying it to the minor ones.

Most of us, for example, have a cheerful tendency to excuse certain faults in our character because

we have decided that such failings are simply a part of our nature. "I shouldn't have been so cross," we say, "but you know how I am before I've had my morning coffee." Or, "I shouldn't have been so rude, but that topic always irritates me."

We should stop excusing ourselves! Such small exercises in self-discipline may seem trivial, but they are not. As we employ them successfully we begin to see that we can use the same weapon—the word "no"—to win large battles as well as small ones. What, after all, is prejudice but the failure to say no to ingrained and twisted habits of thought? What is cowardice but the failure to say no to fear?

There is something triumphantly final about a positive "No!" It clicks into place in the mind like a great lock turning, shutting out doubts and hesitancies, barring for ever the weaker alternatives. Thunderous negatives have played a dramatic part in history. Again and again "No!" has been the battle cry of free men: no to compromise, no to injustice, no to tyranny.

This spirit is not lost, but it is sleeping. Let us, then, awaken it and use it to stamp out the softness and self-indulgence that threaten us.

Traffic Problems

CARS ARE here to stay, or as one wag put it: "Every time you park one car next to another a new car is born" (M.S.) . . . In the early days, people were flabbergasted when somebody drove at 15 m.p.h.—they still are *(Changing Times, The Kiplinger Magazine)*

* *

Top Brass

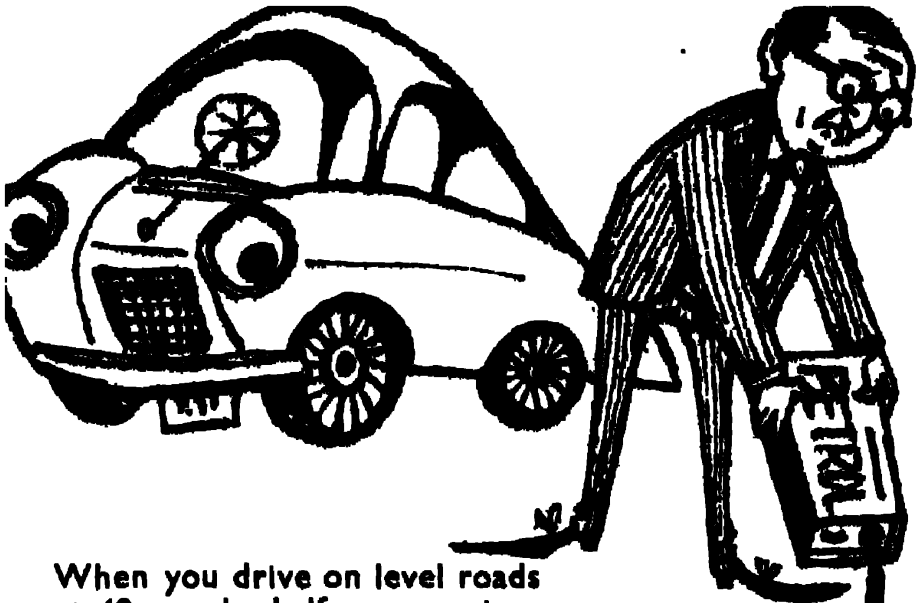
SIGN attached to a colonel's in-tray: "It has come to the attention of this desk that TOO MUCH comes to the attention of this desk." —P. E.

AN advertising executive was talking about the trouble he has in keeping a secretary. "The last one left," he said, "because we had so many office breaks she couldn't sleep at night." —R. S.

BEWARE of status symbols was the advice given by the vice-chairman of a large manufacturing company to businessmen attending a conference. "Put an expensive carpet in your office," the vice-chairman commented, "and pretty soon you'll begin to think you're as good as the carpet."

—Nation's Business

WE KNOW a busy executive who keeps his desk nameplate turned towards himself. He says people who call on him know who he is, but sometimes he tends to forget. —B. V.



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Tutankhamen's Treasure Trove

The dramatic story of the richest archaeological discovery ever made

By James Stewart-Gordon



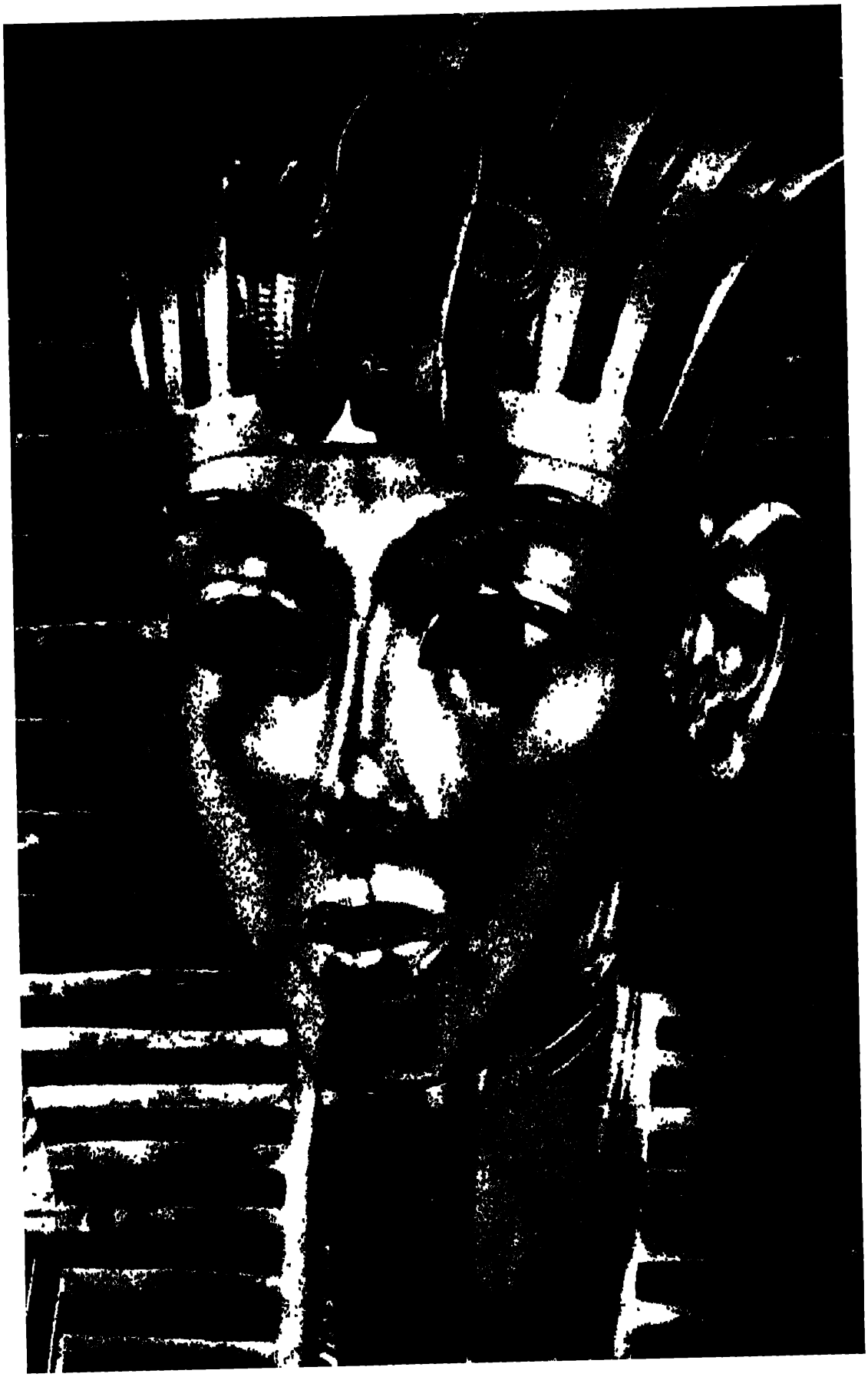
It was the afternoon of November 26, 1922. At the foot of a sloping, rock-walled passage cut into the scarred limestone cliffs of Egypt's Valley of the Kings stood two tense men. Facing them was a door believed to have been sealed some 3,300 years before. Beyond the door lay a treasure greater than any man had ever dreamed of—or an empty cavern.

Archaeologist Howard Carter had searched for this door for 30 years. His companion and patron, rich and scholarly Lord Carnarvon, had spent a fortune backing him for the last eight years. This was the final throw of the dice; if beyond this door they did not find the long-lost tomb of the half-forgotten boy Pharaoh, Tutankhamen, Carnarvon could no longer afford to finance the search.

Cautiously Carter prised at a corner of the door with a chisel, while Carnarvon peered over his shoulder. With the crumbling of each piece of plaster, the suspense mounted.

Bit by bit the hole widened, until

Above: Carved-wood mirror case, gold-plated, bears King Tutankhamen's names and titles
Right: This superb funerary mask is an exact likeness of the young king. It is life-size and made of beaten gold inlaid with semi-precious stones



Carter, with trembling hands, could shine a light in. Moments passed. Carnarvon, his voice hoarse with excitement, whispered, "Can you see anything?"

Carter turned, his eyes almost glazed. "I see wonderful things—wonders," he stammered.

Carter widened the hole so that both could peer inside the tomb. Their torch flicked over a pink chamber 26 feet by 12 feet. The first objects they saw were three large couches carved in the form of wildly elongated, huge-headed animals—covered with gold. As the light moved, it picked up two black life-size statues of men, facing each other like sentinels, before a sealed door. The statues, gold-kilted and armed with maces, wore the protective sacred cobra on their foreheads.

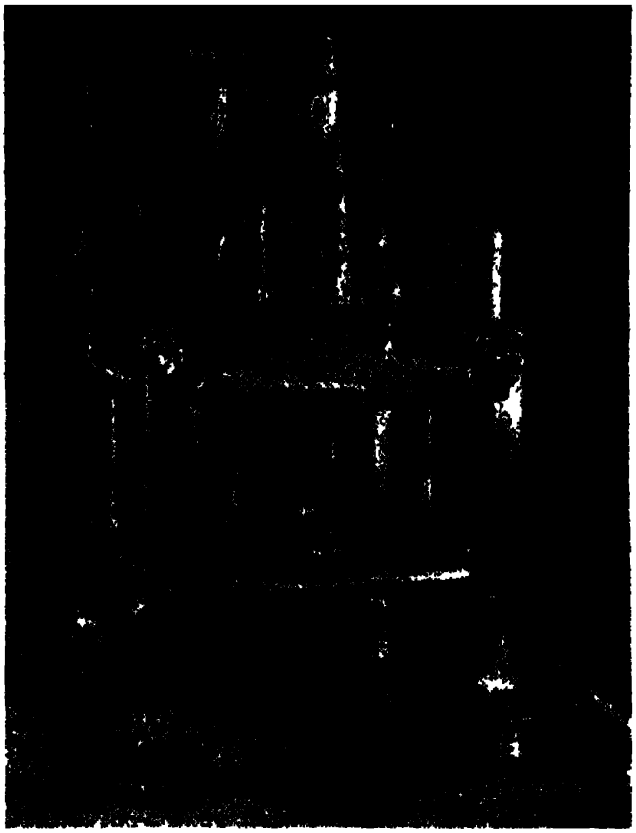
Everywhere the light moved it revealed other wonders: inlaid caskets, alabaster vases, gold beds, beautifully carved chairs, a magnificent gold throne ablaze with coloured stones, musical instruments, a heap of overturned chariots glistening with gold.

There were humbler touches as well: a half-filled bowl of mortar that had been used to seal the door; a fingerprint left by a workman testing a freshly painted surface. But, above all, the mass of jewellery, artifacts, furniture, clothing, cosmetic kits and weapons made this tomb unique. It was a complete time capsule of daily life in Egypt 1,350 years before the birth of Christ.

Professor James Breasted, renowned Egyptologist, said of the scientific importance of the Carter-Carnarvon find: "This is the greatest discovery of any kind ever recorded in any land in archaeological history." The treasure alone could represent the greatest single discovery of concentrated wealth of all time; ten years would be needed to record it and move it to its present location, the Egyptian Museum in Cairo.

The tomb, consisting of four rooms chiselled out of the cliffs' sides, was virtually intact, despite evidence that thieves had entered the first two rooms shortly after the funeral. However, from bits of jewellery abandoned on the floor, it was clear that they had been surprised before they could complete their looting. The tomb had then been resealed.

The burial chamber, guarded by the two armed statues, was undisturbed, and in it was the supreme treasure: four gold shrines, containing a quartzite sarcophagus and a nest of three coffins, the inner one of solid gold. In it was the small, frail body of 18-year-old Tutankhamen, wearing a huge, sad but calm golden mask. Over his neck and breast was a bead and floral collarette of cornflowers, lilies and lotus, withered but retaining a faint colour. They had, experts thought, been placed there by Tutankhamen's child queen, Ankhesnamen, just before the lid of the coffin was



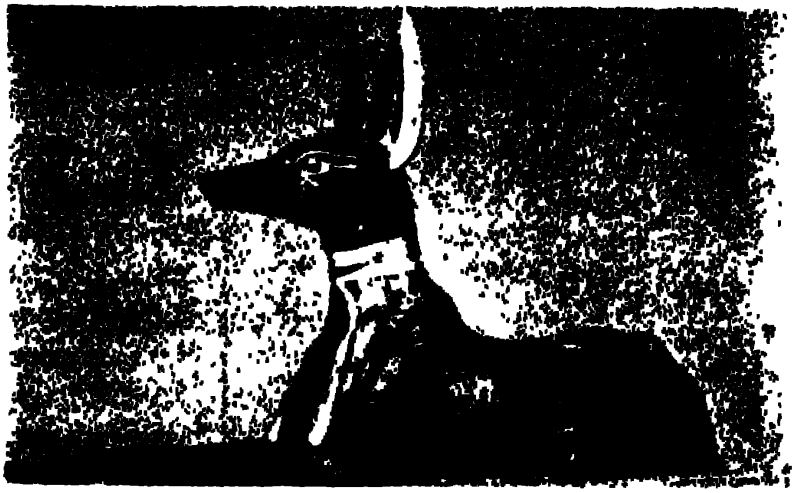
This throne is plated in silver and gold leaf and inlaid with semi-precious stones



Gilded-wood life-size statue of Tutankhamen



Lotus-flower cup (left) is inscribed with wish for Tutankhamen's eternal happiness. Goddess (right) stood guard



Resting on a gold chest, this varnished-wood dog has silver claws and eyes of alabaster and obsidian

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closed. A mural on one of the walls represented Tutankhamen standing between two gods who were receiving him into the world of the dead. He looked young and dignified in his black wig, jewelled collar and kilt of fine Egyptian linen.

The world of 1922 went wild about King Tutankhamen. Hundreds of newspaper correspondents flocked to the diggings near Luxor, the modern city on the site of ancient Thebes, 450 miles south of Cairo. Tourists swarmed over the site like soldier ants. Even today, although there are larger and finer tombs to be seen, Tutankhamen's is a top attraction.

The world remains more than a little starry-eyed about Egypt's Golden-Boy King. In November 1961 the Egyptian Government, to raise money for the preservation of the temples at Abu Simbel, sent an exhibition of 33 small but priceless objects from Tutankhamen's tomb on a U.S. tour. Last year, two new books on Tutankhamen were published,* and more are on the way.

The story of the finding of the tomb will never lose its glamour. And though Tutankhamen is the focus, it was slight, hawk-nosed Howard Carter who wrote the script, directed the action and produced the drama.

Carter was born in Swaffham, Norfolk, in 1873, the youngest son

among nine children of a noted animal painter. When he showed a talent for drawing, he came to the attention of his father's patron, Lord Amherst, who in turn recommended him to Professor P. E. Newberry to copy some Egyptian drawings that Newberry had brought back to England. Carter's work so pleased the professor that the next year, when Howard was 18, Newberry took him to Egypt on an expedition.

He took part in excavations, copied wall paintings and made drawings of statues—all the while learning the native speech and customs. By the time he was 26 he had taught himself enough Egyptology to get a job as Inspector-in-Chief for the Monuments of Upper Egypt and Nubia.

Now began Carter's great adventure—the search for the tomb of the least known of all the Pharaohs, Tutankhamen. Each king had left a record of his glories and achievements carved in stone. Tutankhamen had added inscriptions to the temple at Luxor in the middle 1300's B.C. But his tomb had never been found. Carter reasoned that if a rifled tomb had existed, some relics would surely have come to light. He haunted the tents of the nomads and the bazaars of the cities looking for artifacts. None had turned up.

Then, in the middle of his search, Carter was forced to resign his job when his subordinates allegedly insulted some influential visitors. He

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remained at Luxor, trying to earn a living painting watercolours of the desert for sale to tourists. He was on the brink of starvation when one day he was stopped in the bazaar by Ali, who had been his foreman.

"Come stay with me, *effendi*," said Ali. "You must get your health back so you can return to your search."

For two years Carter lived with Ali in his white hut in the shadow of the cliffs of the Valley of the Kings. Then Theodore Davis, a wealthy American businessman, came to Egypt and applied for a licence to excavate. The authorities would grant it only if he employed a professional excavator. Davis hired Carter.

One day the diggers turned up some large jars. In one were bits of clothes. Davis was disappointed, but Carter was beside himself with excitement: one of the items bore a royal seal with the name "Tutankhamen" in hieroglyphics. Here was the first real clue in ten years! Davis was unimpressed, however, and ordered Carter to dig elsewhere.

In 1914, when Davis let his concession revert to the government, Carter was recommended to Lord Carnarvon, a wealthy amateur archaeologist who spent his winters in Egypt. Carter suggested that Carnarvon apply for the Davis concession and that they look for the tomb of Tutankhamen. Carnarvon agreed. But before Carter and Carnarvon got started, war engulfed the world. Carnarvon returned to England; Carter, whose knowledge of the desert tribes was phenomenal, became an agent of British military intelligence. In 1917, when the war in the Middle East was all but over, Carter returned to his digging. Disappointment followed disappointment for five years.

Carnarvon eventually summoned Carter to England and told him that he would have to abandon the search. "It has cost me a fortune, and I can't afford the luxury," he said.

Carter begged for one last try. Carnarvon laughed. "Howard," he said, "I'm a gambler. I'll back you for one more toss. If it is a loss, then I am through. Where do we begin?"

Carter showed Carnarvon a map of the valley. He had drawn it with painstaking care. Each section which had been explored was marked. Putting his finger on a spot just below the tomb of Rameses VI, he said, "There. It is the last place left."

Carter returned to Egypt and ordered his men back to work. Tons of stone had been removed in a previous try, and now they were down to some rubble huts used by the workmen who built the tomb of Rameses VI about 1160 B.C. For three days the diggers hacked at these. On November 4, when Carter appeared at the excavation at 6 a.m., he found the workmen gathered in a group. "We have uncovered a step, cut into the ground," Ali, his foreman, said. By nightfall the following day, 12 steps had been

she could not resist* (so won't you)

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found, leading down to a door. Carter felt in his bones that the long search was almost over.

He ordered his men to guard the diggings against robbers. Then he sent a cable to Lord Carnarvon: "At last have made wonderful discovery in valley; a magnificent tomb with seals intact; re-covered same for your arrival; congratulations."

Carnarvon and his daughter left immediately for Egypt. With Carter, in a ferment of excitement, they watched the excavation. Behind the door was found a passage filled with rocks left by the builders of the tomb to discourage grave robbers. At the end of the passage was another door—and behind that door lay the wonders.

Five months after the great discovery, Lord Carnarvon died suddenly. His death touched off the myth of "the Pharaoh's curse." According to newspaper stories, an inscription in Tutankhamen's tomb had promised that death would come on swift wings to whoever touched the tomb. Carnarvon, supposedly, had been the first victim. Carter denied the story vehemently, and kept on denying it for the remaining 16 years of his life. Still, when 12 of the men concerned with the opening of the tomb died within the next seven years, the legend became permanently affixed to the Tutankhamen story.

As a Pharaoh, Tutankhamen was a nonentity—an 18-year-old boy who reigned for only ten years. But as a figure around whom legends have grown he is bigger than even Rameses the Great with his mighty temples, his numerous wives and his regiment of children. There can never be anything like King Tutankhamen again.

Pretty Fishy

A FISHERMAN got tired of catching and throwing back small perch. Finding a coloured ribbon in his pocket, he began tying pretty red bows on each perch before throwing it back. It wasn't long before another fisherman came dashing up to him, wide-eyed, and cried, "You won't believe what I'm going to tell you ..." —J. K.

Lost Cause

KNOWING that a friend needed some new bedding, I had been enquiring into the price of blankets. Suddenly I realized that the assistant must be getting tired of pulling them down from the shelf, where there was now only one left. "I'm terribly sorry," I said. "I'm really not buying today. I was only looking for a friend."

"Well, madam," replied the assistant wearily, "I'll take down the last one if you think he's in it." —Francis Leo Golden

The Challenge of Confident Living

Page 160

Modern psychology gives new impetus to each individual's search for self-confidence and personal fulfilment

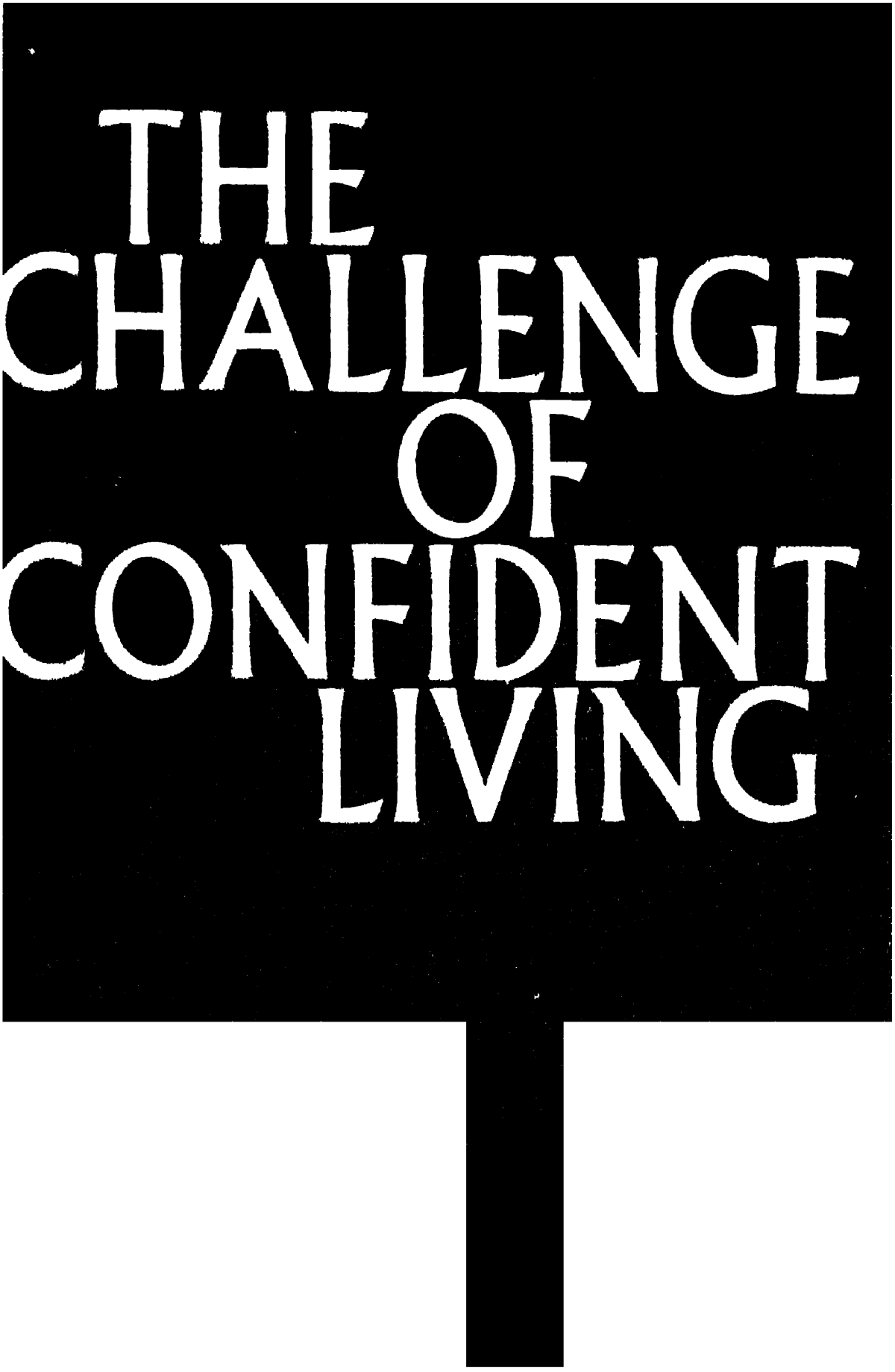
By Robert O'Brien

THERE SHE BLOWS!

Page 183

The seafaring adventures of the courageous whale-hunters of a hundred years ago

From Herman Melville's classic, "Moby Dick"


THE
CHALLENGE
OF
CONFIDENT
LIVING

Is it possible to do something about the bane of feeling ill at ease in personal and social relationships? Can we overcome our reluctance to act naturally in *any* surroundings, however unfamiliar?

The answer—based on new trends in psychological thinking and common-sense study of this pervasive problem—is an unequivocal "yes."

THE MORE I listen to people expressing the doubts and fears in their hearts, the stronger grows the conviction that many of us are going through life—through this exciting, dangerous and infinitely beautiful world around us—as though we had somehow wandered off course. Something is missing, some meaning we once believed in, some zest and tingling joy of life. More than this, and perhaps at the bottom of it, we seem alienated from ourselves, out of touch with our true inner identity. We lack the one quality that would set things right in our lives. That one quality is self-confidence.

Conscientious, capable men and women everywhere are being held back, are unable to do the best they can—all because they lack self-confidence. You may know a dozen or more of your acquaintance. In fact, regardless of the façade that we present to the world, it is safe to say that nearly *all* of us face this problem in one degree or another.

In one university survey, 600 students were asked to name their biggest personal problem. Three out of four replied, "Lack of self-confidence." In another study nearly nine out of ten interviewed confessed that they suffered from feelings of inferiority and inadequacy. Psychiatrists agree that lack of

confidence is perhaps the most common of all psychological complaints.

When I talked this problem over with my doctor, he provided a forceful example of the contrast between self-confidence and its absence: "Two friends of mine—Brown and Jones—saw a man topple to the street from a heart attack. Both had recently read the same magazine article about first aid to coronary victims. But they hesitated.

"Then Brown stepped forward, knelt down and as best he could began the simple measures that probably saved the man's life. Jones hung back.

"What a study in self-confidence, and in the lack of it! Brown was positive, acting to the best of his ability. He knew that what he could do wasn't perfect, but it was better than nothing, and he did it. Jones, however, saw the situation negatively, *in terms of his own inadequacy*. He saw it as a personal crisis *for himself*. He couldn't act because he was afraid of failure."

People like Jones are crippled, in a very real sense. But they are not by any means exceptional. I know a public-relations man for an industrial firm who wants to go into business for himself but lacks the nerve to make the break. A hard-working salesman down the road thinks he deserves more money, but he can't bring himself to ask for it for fear of displeasing his boss. A television executive sneaks a couple of fast drinks to bolster his nerve before an important conference. A pretty girl undergraduate has an "inferiority complex" about her attractiveness to men, discourages their advances, buries herself in books, over-eats, pretends to find dating and dancing "frivolous"—and is, she confessed to her mother recently, having a "perfectly miserable" time.

Is there something we can do about this pervasive problem? Can we move towards more confidence in ourselves, more sense of belonging, more trust in life? Can we tackle the task ourselves, with only the resources we have within us?

The answer is, unequivocally, yes.

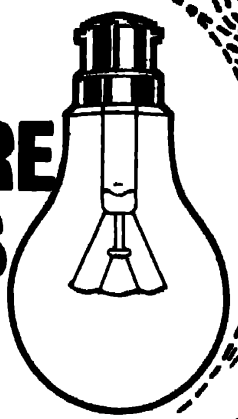
A Process of Becoming

UNTIL recently, this was not the case. Until the work of Dr. Sigmund Freud and other pioneers in the exploration of the human psyche could be placed in proper perspective, any thought of self-development of confidence seemed hopelessly out of reach.

Why? One school of psychology said that our personalities were irrevocably fixed by feelings experienced and buried beyond recall in the first three years of life. Another believed that we were lifelong slaves of instinctual drives, such as sex and aggression.

Still another group—the so-called "psychological determinists" — proved that we were mere "reactive robots," responding mechanically to proddings from social

IA-163



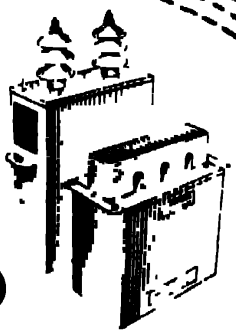
MYSORE LAMPS



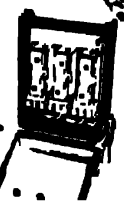
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HOUSE SERVICE METERS



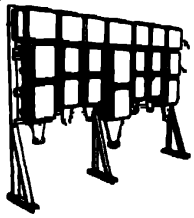
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and economic necessities. A fourth group told us that our personalities were the products of heredity and environment — implacable, uncontrollable influences whose work we could never hope to change.

In any case, it was useless to try to change, to grow stronger, to develop self-confidence where none had existed before.

But, curiously, much of the force of these positions resulted from findings based on the pathological—on the reactions of caged and desperate rats, and of sick, anxiety-driven people. As one psychologist writes, there were "many studies of criminals, few of law-abiders; many of fear, few of courage; more on hostility than affiliation; much on the blindness in man, little on his vision."

Today, however, a new school of psychology is rising like a sun from these barren mechanistic searchings. In a powerful swing away from the extremities of the Freudian theory, the students and teachers of a new generation are developing a psychology of health that offers an exciting contrast to the traditional views of the personality.

This psychological movement relies not on the study of sickness, but on the examination of the minds, personalities and performance of healthy human subjects—men and women fairly competent to meet the ordinary problems of life, who have no apparent symptoms of physical disability and no incapacitating mental or emotional disturbances.

In brief, this concept affirms that we are more than mechanical units, more than slaves of shadowy inner drives and uncontrollable instincts. Our personality instead is a process of "becoming." It is a growing, an inner flowering, conditioned by things that happen to us as we strive towards our goals.

We may say it is like a card game. Life deals us our cards. But how we play them is up to us. And it is in our power to improve the quality of our play as we go along, our whole life through.

The new school of thought is optimistic about the human spirit and the capacity to grow. It acknowledges the reality of self-sacrifice, heroism, giving and the strength of love. It is charged with inspiration and hope, for it recognizes the revolutionary power in the immeasurable, ungraphable stuff of hopes and dreams, striving and wonder, faith, laughter and fun.

Not only does it affirm these truths, but it goes further than psychology ever went before to add stature to the individual. For it tells us that we are like *all* others in some respects; we are like *some* others in some respects; but finally, in some respects, each of us is unique. There has never been anyone like us. There never will be. Never will anyone else possess our special individuality, our particular possibilities. This, in itself, is a challenge.

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This dynamic view of the personality transforms our search for self-confidence into an exciting odyssey, a vital and golden endeavour. More than that, it defines the quest with some of life's deepest and most urgent themes—the yearning to grow and the struggle for individual fulfilment.

Fear of Failure

PERHAPS the best introduction to the quest for self-confidence is a brief look at its opposite—lack of confidence.

We have seen it at work. We know that it eats away at our courage, optimism and capacity to enjoy life. It deadens the zest and washes the colour out of days that should be our brightest. It holds us back in our jobs, limits us socially, keeps us from getting more out of life.

The operative factor is fear of failure. One of the first steps in getting to know the self better is to ask, when lack of confidence has held us back: Why did we fear failure?

The explanation, in most instances, is within easy reach. We fear failure for one all-important reason: we are afraid of what others will think of us when we fail, of how they will be angry with us, or contemptuous, or laugh. *Their opinion of us is more important to us than our opinion of ourselves.*

Certainly, we realize that in any venture failure is a possible outcome. Even if we ourselves perform perfectly, circumstances beyond our control can bring about partial or total failure. Intellectually, we *know* that everybody can't be a winner. But for some reason, in some situations, we fear failure so much that we would rather not try at all than risk it.

What are the factors underlying this tendency to avoid risk?

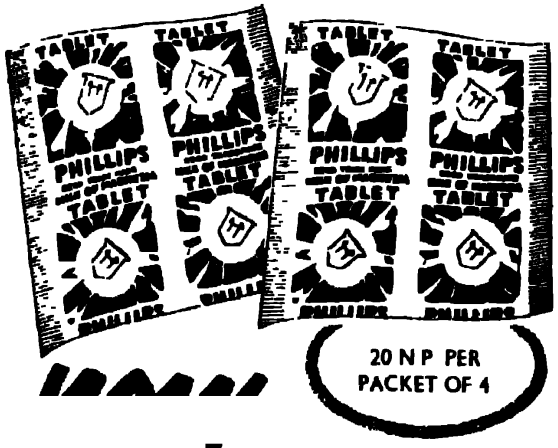
Broadly speaking, we can distinguish two kinds of lack of confidence: the general and the specific.

General lack of confidence fills you with an all-pervading feeling of inadequacy. It colours, or discolours, your entire life, leaves you with a negative approach to every relationship and every task. It makes you afraid to act creatively, afraid of change, afraid of the future. It makes every stranger a threatening enemy. It makes every kindness suspect of ulterior motive, every stroke of good fortune a harbinger of possible disaster.

I once interviewed an executive who had risen from a childhood in the slums to success in the highly competitive clothing industry. He attributed his success to the philosophy picked up in his boyhood streets. "They taught me that the world is a jungle, that it's dog eat dog, and you get the other fellow first, or he'll get you."

The man had a tough, aggressive air that some might interpret as self-confidence. In reality, it expressed fear, wariness and hostility —revealing underneath the very reverse of self-confidence.

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His "law of the jungle" demanded total, unswerving attention and watchfulness. He had no other life or interests. His bored wife spent her time travelling to and from their several homes. His daughter was unhappy in a fashionable finishing school. His son gave up studying law after a conviction for drunken driving. He and his father never write to each other, never see each other, and might as well live on different planets. For all this man's outward appearance of self-confidence, his inner insecurity has drained his life of joy.

Specific lack of confidence is far more common than general lack of confidence. But, fortunately, it is far less disabling. We may, for instance, be superbly confident on the job, but shy as a deer on the dance floor. We may be relaxed and expansive in the company of friends, but tense and withdrawn at formal meetings. A doctor may work smoothly and efficiently in a well-equipped hospital operating theatre, but feel unsure of himself when suddenly called upon to treat a crash victim beside the roadway.

Specific lack of confidence need not indicate deep-seated insecurity in our natures. Indeed, there is nothing particularly upsetting about this kind of situation. The danger is that the specific lack of confidence —lack of confidence in one certain situation—may spread, like an infection, until it becomes general, dampening our every pleasure.

It can happen like this: When it developed that a housewife was unable to bear children, she and her husband arranged to adopt a baby. But when after months of waiting they received word that an infant was ready for them, she suddenly felt unable to accept the child. In tears, she begged her husband to release the infant to another couple.

"Because I can't have a baby," she said, "I discovered that I had no confidence in my ability to take care of one. At first, it didn't bother me. 'All right,' I told myself, 'I'll work at it and I'll learn.' But then I began losing confidence in myself as a woman. And if I don't have that, how can I possibly make a good mother?"

Several long talks with an understanding doctor convinced her that procreation, after all, was not the only purpose in life. Her inability to have children by no means impaired or diminished her womanhood. In fact, the doctor told her; it might make her cherish the child more than ever. Not only did it work out like that, but now she and her husband plan to adopt another.

Three Warning Signs

LACK of confidence is by no means cause for self-recrimination. We all feel it sometimes. "Every day," writes Dr. Gordon Allport in *Pattern and Growth in Personality*, "we experience grave threats to our self-esteem: we feel inferior, guilty, insecure, unloved. Not only big

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things but little things put us in the wrong: we trip up in an examination, we make a social blunder, we dress inappropriately for an occasion. The ego sweats. We suffer discomfort, perhaps anxiety, and we hasten to repair the narcissistic wound."

Lack of confidence in many respects is a normal, legitimate condition. In our youth, life is filled with questions and doubts, and strange new situations in which we quite naturally lack confidence in ourselves simply because we are inexperienced at living. Comes middle age, with its imagined serenity, and again we are beset with inner doubts about decisions we make as parents, or in our professional lives. Then, as we grow older, new questions, new crises, arise to make demands upon us. Self-confidence that we won through to in earlier years may seem to fall short of our needs, or to have ill-prepared us for the tasks we now face.

Yet, frequently, we can actually be grateful to our lack of confidence, for it may be signalling us that some situation is out of harmony in our lives. Among such situations, the three that follow are the most common.

Lack of information. We often encounter men and women today who are literally victims of good times. Because the companies they work for are booming, they have moved ahead too quickly to absorb the knowledge and experience their new jobs require. Few situations are so unnerving.

On a recent air trip, for example, I fell into conversation with a young engineer in the next seat. He told me he was a department head for a prosperous electronics firm. I was fascinated. "At your age?" I exclaimed.

He smiled thinly. "That's my biggest problem.

"When you're offered a flattering promotion and higher pay these days, you just don't turn them down. So I took the job. It wasn't a week before I learned the truth: I was out of my depth. The self-confidence I'd felt about my old job—which probably won me the promotion—ebbed away like a fast tide going out."

What did he do? His first reaction was to adopt the technique of the cover-up, the bluff, the donning of what he called "a mask of competence and confidence" to conceal his real state of mind.

"It was an incredible experience," he said. "For the first time in my life, I felt able to spot a phoney a mile away. I felt a positive kinship towards phoneys—because I was one myself!"

"Can you tell me how it worked out?" I asked.

He smiled. "It isn't easy. But if you're ever in the same spot, my advice is, don't be afraid to say, 'I don't know,' and don't be afraid to ask for help from more experienced men. It worked for me. And it taught

me something else, too. What the poet says is true—'No man is an island.'"

Lack of recognition. No matter who we are or what we do—housewife or long-distance runner, medical student or bus driver—we all need a reasonable recognition of our efforts, whether it's praise, a good mark, a rise in pay or just an appreciative word.

A few years ago, a major oil company asked a group of managers and technicians to name common causes of dissatisfaction among fellow workers. The answer most frequently given: "Lack of progress, lack of appreciation or recognition."

Parents, athletic coaches, stage directors, army officers and others in authority frequently withhold praise for fear it will "go to the heads" of their charges. It seldom works. "Nothing kills confidence faster than always keeping the pressure on, a famous coach told me. "If you work your heart out at the high jump, and finally clear the bar at six feet, you deserve appreciation. You're going to wonder whether it was worth it, if the coach comes over and says, 'Fine, boy—but you can do better than that. Let's move it up an inch.'"

Honest praise, a friendly pat on the back, are glowing rewards for work well done, and healthy spurs to self-confidence. But let's not depend on them, or fall into the habit of doing what we do for the sake of applause. Let's learn, instead, to appraise our own performance, ourselves. Then, even if no one has been looking, or no one ever knows, we'll have the inner satisfaction of knowing where we've succeeded, where we've fallen short, where we can do better next time. This is a way to self-confidence.

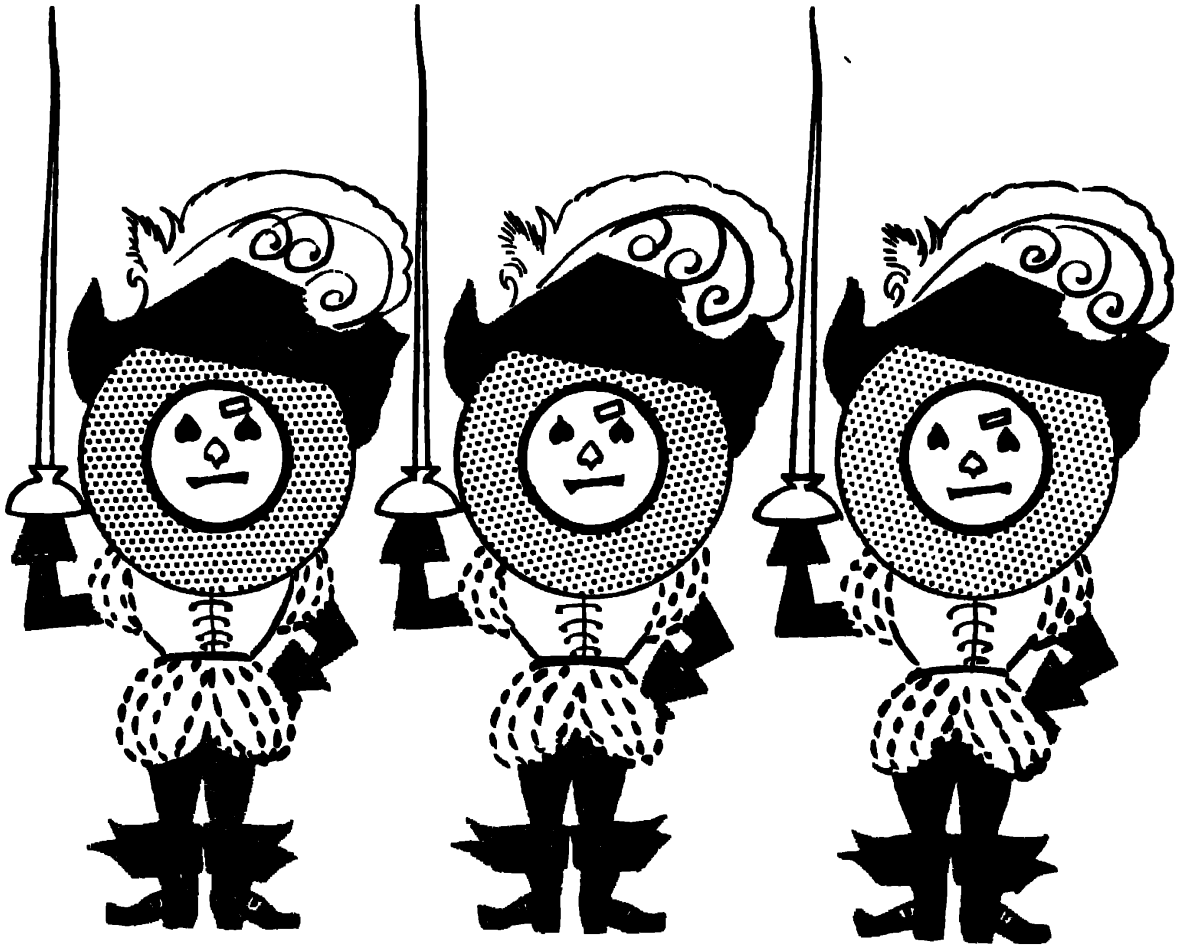
Lack of familiarity. Years ago, my first editor gave me some priceless advice. Still the greenest of cub reporters, I was leaving for a bigger paper in a strange town. "New faces, new names, new surroundings build pressure, so give yourself a break," he said. "Learn your way around, get the feel of the town first. Then you'll be ready to jump into the thick of things. Remember, this new place isn't unfriendly; it's just unfamiliar."

Many of us are sometimes confronted with an unfamiliar community, and the temporary lack of confidence that it quite naturally generates. Others, in addition to these disturbing influences, are on the way up the ladder, and are encountering strange new social situations at their new income levels.

The solution, in most instances, is first of all to recognize that our uneasiness is quite natural under the circumstances, and that everyone, facing something new and unknown, shares it. Second, we can take concrete steps to explore and find our way around our new world.

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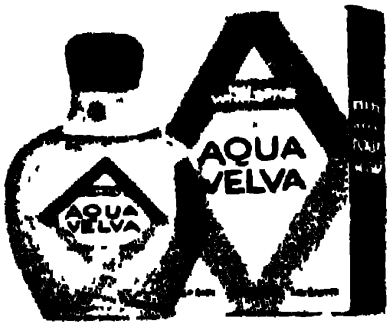


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at home after moving to a strange community than reading up on its local history. "Streets and churches and neighbourhoods, once I knew their past, became like old friends," he said. "Furthermore, it qualified me to join the local historical society and provided a fascinating entrée into community affairs." In almost every community, friendly groups with interests ranging from politics to birdwatching, from chess to choral singing, are waiting to welcome newcomers, to take the edge off our shyness, our uneasiness in the face of the unfamiliar.

Two Kinds of Confidence

As WITH lack of confidence there are, broadly speaking, two kinds of self-confidence—again, specific and general.

William Lyon Phelps left us a splendid interpretation of specific confidence in his *Autobiography*. "It means," he wrote, "that one is certain of one's ability to perform the assigned task, certain of being equal to the situation; and secondly, it means that one enjoys the work in the assurance that one can do it well."

Where does this kind of competence and certainty come from? How do we acquire it? By working for it, by really wanting it deeply and earnestly enough to earn it with practice, with hard, often repetitive and seemingly unrewarding labour.

Valuable insights into specific confidence and how we may acquire it can be gleaned from men and women in two fields where it is dramatically apparent—athletics and public speaking.

It is legendary that Jack Dempsey sparred long, gruelling rounds with his right hand tied behind his back to develop extra hitting power with his left. Lawyer Louis Nizer, author of *My Life in Court,* says that even if we are panic-stricken at the thought of speaking before an audience, we can ultimately overcome our fear—if we want to. How? "Go through the hellfire so often that its heat becomes tolerable."

A friend of mine, the mother of four, stood as a candidate in the local elections. By the end of the campaign, she was making several hard-hitting speeches an evening, before large audiences. I asked her about her poise and confidence. Had she studied public speaking? She smiled. "No. I just started small—and worked at it."

In the same fashion, thousands of hours of practice produce the commanding self-confidence of the concert pianist as he strikes the opening chords of a concerto. Not even an artist of the stature of Paderewski found—or asked—another way. "Before I was a genius," he once said, "I was a drudge."

The second—and rarer—kind of self-confidence does not depend solely on ability in a special field, or competence in a specific situation. It is, rather, a general character trait:

an expression, for the most part, of an inherently trusting nature, of a secure and growing personality. It is most directly and most beautifully evident in people who *believe,* who are trusting enough, or daring enough, to believe.

Belief in almost anything that we regard as larger and more important than ourselves is, of course, a fundamental source of strength. But the belief that underlies and produces *general self-confidence* is, first and foremost, belief in yourself, in your intrinsic worth as a human being. It is, moreover, belief that while this may be a world touched with a measure of suffering, inequality and injustice, it is also a world touched with wonder, miracles, kindness and dreams—by and large, a good world.

General self-confidence is the quiet self-respect of a young woman who applied for a job as an executive secretary. When the interviewer mentioned references, she took a letter from her bag. It was a straightforward recital of her skills, her interest in the company, her desire to serve. It bore her own signature. The interviewer smiled. "We don't usually consider reference letters written on one's own behalf." There was a proud lift to the girl's head.

"I know," she said simply, "but I believe in my own worth. I believe in myself." From those words on, the job was hers.

People who have earned or won through to a high degree of general self-confidence frequently find themselves facing a task with little or no inner assurance that they can carry it off. But their lack of specific self-confidence under such circumstances seldom holds them back. They have a generalized faith in themselves—in the knowledge that they will do their best; in their ability, having done their best, to accept whatever happens; in their conviction that, whatever happens, there are positive lessons in every experience.

They need not egotistically "prove" themselves. They derive a kind of all-pervasive confidence from what philosopher William James called an "enthusiasm of self-surrender." Give us a certain amount of it, he wrote, and "the result is always the same. Our conventionality, shyness, laziness and stinginess, our demands for precedent and permission, for guarantee and surety, our small suspicions, timidities, despairs, where are they now? Severed like cobwebs, broken like bubbles in the sun . . . Set free of them, we float and soar and sing.

"Know Thyself"

THE WARMING and guiding light of life, the inner sureness that we have been calling general self-confidence is not a simple thing to develop. The tides of personality run strong and deep. You cannot permanently change their course by wishful thinking or by well-worded resolutions.



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But you can make a *start*. The first step is acceptance of yourself—a self-love that is neither vain nor selfish, but rather one that is tolerant and understanding, one that you might feel towards an old friend.

Your friend, let us say, has his flaws. He is tiresome at times, unreasonable at others. He has his limitations—both physical and mental. He is good at some things, poor at others. He can be cross and charming; sad and gay; strong and weak; hopeful at times and at others filled with gloom.

In short, he is not much different from the rest of us. But he is your friend. Affectionately, with amused tolerance that has drawn you closer through the years, you put up with him. This, ideally, is the way you regard yourself.

A large part of the task of achieving mature self-acceptance lies simply in getting to know yourself better—discovering the ideas and things that are important to you and *why* they are important.

Look into yourself, into your past. What was the appearance and tone of the community you grew up in? How did you feel about families with more money than yours? With less? What did you think of your father's occupation? What part has religion played in your life? What do you consider your good points? Your weaknesses?

Learn from this meditation about yourself; then, as you go along in everyday life, try to develop a

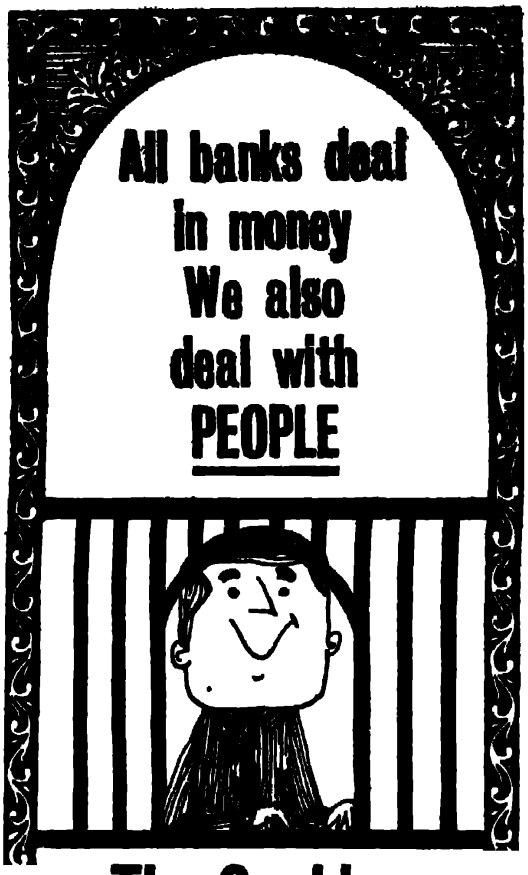
healthy, objective curiosity about the way you behave and feel. Ask yourself questions that probe your approach to life's problems. How many of your basic beliefs about life are your very own? How many have you read or heard somewhere—perhaps from your parents—and adopted unconsciously, without close examination, as your own? Test them carefully. It is vital to self-acceptance—and self-confidence—to know where you really stand.

Ask yourself, "How much of what I think and do is determined by what others expect of me? Am I being the person I really am, or am I acting out a role into which I've been cast by someone else whose affection I need?" And "Am I being myself, or am I imitating someone else?"

Thoughtfully, painfully and perhaps even prayerfully felt-out answers to questions like these will help to increase your self-awareness, and hence your self-acceptance. Once you start, it will be hard to stop. You will succeed, and fail—and learn. Robert Henri tells us what it is like, in *The Art Spirit:* "Find out what is really important to you. Then sing your song. You will have something to sing about, and your whole heart will be in the singing."

Accept Others

THE MAN with self-confidence like an inward gyroscope also accepts and trusts others. Caring—the



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simple act of caring for something or someone—awakes strange and thrilling powers.

The more you care about others, the more confidently you act. There is nothing you cannot do, no defeat you cannot survive, no fear you cannot overcome, when you are concentrated heart and soul in helping others.

As long as you look on others with distrust and suspicion, true self-confidence will elude you. For then the world is a jungle inhabited by two kinds of people: those whom you can dominate, and those who seek to dominate you. Your way of life is not self-confidence, it is self-protection.

But have faith in others, feel warmly towards them as fellow human beings, be interested in them, seek to learn from them, *care* for them, and what a different world it is!

Communicate. Unless you share your personality with others, it is like a portrait kept in a locked room. Psychologists estimate that 90 per cent of everything we do, say, think or feel involves interaction with others.

In this kind of existence, we need someone to tell our troubles to, someone to whom to confess our shortcomings, someone with whom to share our failures and triumphs, someone with whom we can "be ourselves."

Co-operate. "Open your eyes and look for some man," writes Dr. Albert Schweitzer, "or some work for the sake of men, which needs a little time, a little friendship, a little sympathy, a little sociability, a little human toil. Search and see if there is not some place where you may invest your humanity."

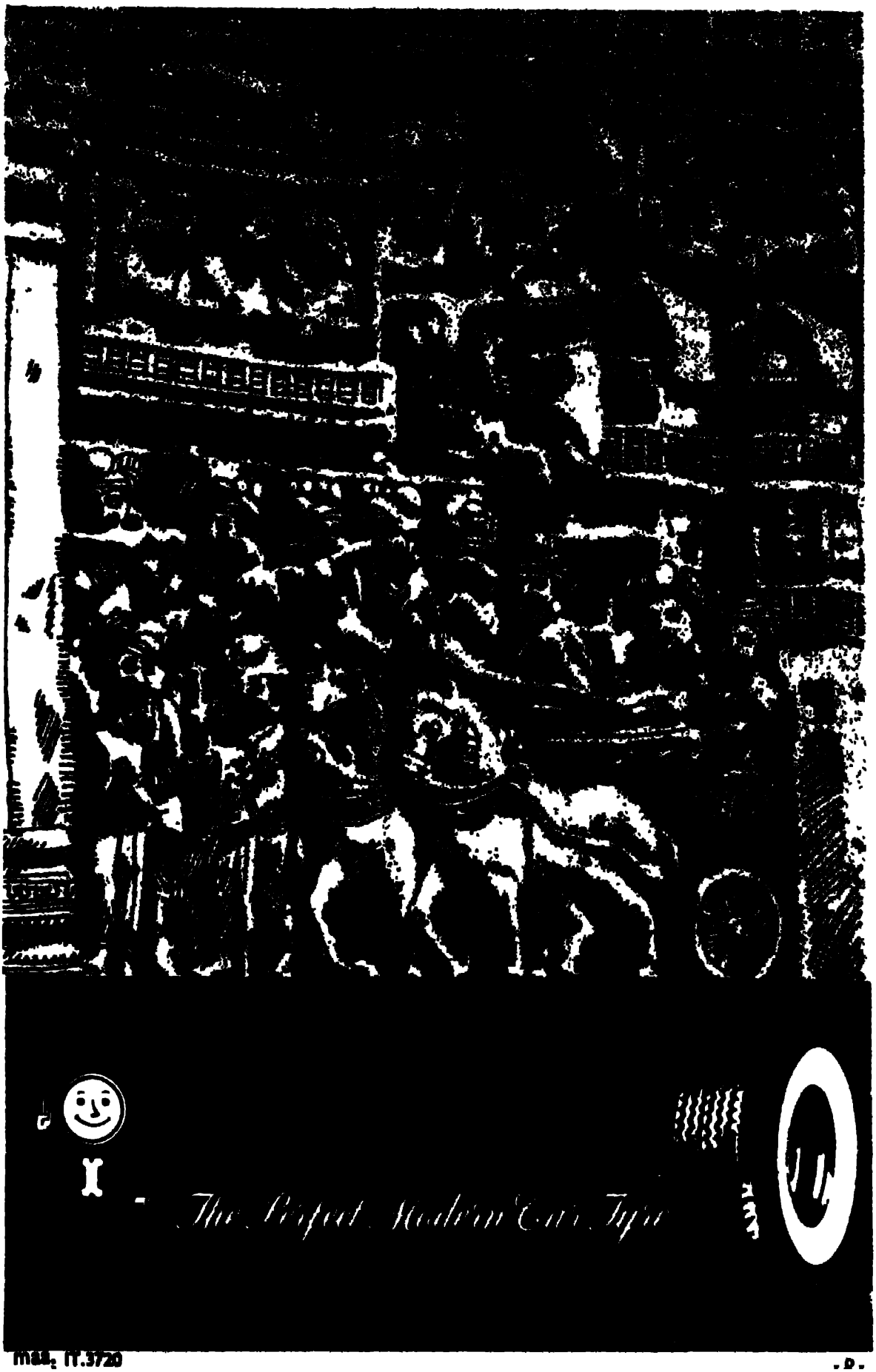
Likewise, ask others for *their* help.

"I've arrived," says composer Richard Rodgers, "at a one-word philosophy. I've never done anything alone in my life. I was conceived, nursed, brought up and taught by others. I have shows, but I have chorus girls dancing in them; I don't do the dancing. Here is my one-word philosophy. It's the one I've come to live by: Help."

Try taking a chance on people. With an open heart, try asking for help. This, in itself, is an act of self-confidence.

Dr. Alfred Adler, a colleague of Freud's and a pioneer in his own right, used to say to his patients—victims of fears, anxieties, depression—"You can be cured in 14 days if you follow this prescription. Try to think every day how you can please someone. Make use of all the time you spend when you are unable to go to sleep by thinking of how you can please someone, and it will be a big step forward in your health."

Then he added, "All my efforts are devoted towards increasing the social interest of the patient. As soon as he can connect himself


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with his fellow men on an equal and co-operative footing, he is cured."

Accept Life

"BELIEVE that life is worth living," said William James, "and your belief will help create the fact." This is the final rule: total acceptance of life—the beauty and the pain, the glory and the suffering.

Regular daily prayer—Paul Claudel's "identifying oneself with the divine will"—is one way of achieving this. Other ways lie within easy reach. Cherish silence and stillness; cherish being alone for a few minutes each day. Establish goals. They set us on the move, and one of our crowning glories is that we are capable of striving—of giving our lives—for goals that we may never achieve; for goals, that, indeed, may be unachievable.

"If you would make human beings happy," writes W. Macneile Dixon in *The Human Situation,* "give them a task and a cause, and the harder the better. It is when the gods call them that men rise to the crest of their powers. Then they become themselves gods. Their greatness lies in their dreams."

Nothing will strengthen your self-confidence more than a clear-cut, specific destination, a striking out on the long adventure that will lead you towards it. Remember, it is a journey not of weeks, or months, but of years. Be patient. Be contented with small gains.

As you begin to find self-confidence, you will begin to transcend it, to dare to act with utter selflessness. We all know this is true. It has happened to us—the rare time when, without thought of self or safety, we did something that normally we would consider impossible. And so we achieve the summit of self-confidence, in that moment when we act naturally, spontaneously, creatively — without the slightest self-conscious concern for whether we are confident or not.

As it is the aim of our doctor to help us attain a state of health in which we do not need him, so it is the aim of the search for self-confidence to enable us to act freely, fearlessly, assuredly, without a thought to whether or not we are acting in self-confidence. We shall act as if there is nothing to be afraid of, nothing that we cannot accept.

Your greatness lies in your dreams. But they are great only to the extent to which they inspire you to work and strive towards them. When they do, you will find that you are wiser and happier than you have ever been.

You will be turning towards the deepest kind of confidence. You will walk in a new world, and your heart will be singing. THE END

JAMES THURBER's rejoinder to the cliché greeting, "How's your wife?" was: "Compared to what?" —J. B.

There She Blows!

from "Moby Dick" by *HERMAN MELVILLE*



Moby Dick, "that amazing creation forged in the white heat of Melville's genius," is one of the great classics of the past century. It paints a first-hand picture of the gallant days of whaling in the 1850's; of hardy sailors and wild harpooners; and of cockleshell boats attacking great whales.

In its full scope this narrative—to quote John Masefield—is a "wild beautiful romance speaking the very secret of the sea." But woven with this romance is "the truest and most readable history of a whaling voyage ever written," full of humour and lusty adventure.

CALL ME Ishmael. Some years ago, having little money and nothing to interest me on shore, I thought I would sail about and see the watery part of the world. It is a way I have of driving off the spleen. Whenever I find myself growing grim about the mouth; whenever it is a damp, drizzly November in my soul; whenever I find myself involuntarily bringing up the rear of every funeral I meet—then, I account it time to get to sea.

I do not mean that I ever go as a passenger. For a passenger must have a purse. Besides, passengers get seasick—grow quarrelsome—don't sleep of nights. No, when I go to sea, I go as a simple sailor, right before the mast. True, they rather order me about, and at first this sort of thing is unpleasant enough. It touches one's sense of honour. But this wears off in time.

What of it, if some old hunks of a sea captain orders me to scrub the decks? What does that indignity amount to? Do you think the archangel Gabriel thinks any the less of me, because I promptly and respectfully obey that old hunks? Who ain't a slave to something? Tell me that.

I was determined now to go on a whaling voyage. Therefore I stuffed a shirt or two into my old carpet bag, quit the good city of old Manhattan, and duly arrived in New Bedford on a Saturday night in December.

As the packet for Nantucket did

Illustrations by Karl Friedrich Brust, from "Moby Dick," published by Ensslin and Laiblin, Germany



not sail until Monday, it became a matter of concern where I was to eat and sleep meanwhile. It was a very dismal night, bitingly cold and cheerless. I knew no one in the place. With anxious grapnels I had sounded my pocket, and brought up only a few pieces of silver—So, wherever you go, Ishmael, said I to myself as I shouldered my bag, be sure to enquire the price, and don't be too particular.

I passed the sign of "The Crossed Harpoons"—but it looked too expensive and jolly there. By instinct, I followed the streets that took me waterward, for there, doubtless, were the cheapest, if not the cheeriest inns.

Such dreary streets! Blocks of blackness on either hand, with here and there a candle moving about as if in a tomb. But presently I came to a light, and heard a forlorn creaking in the air; looking up, I saw a swinging sign: "The Spouter-Inn." As the light looked so dim, and as the swinging sign had a poverty-stricken sort of creak to it, I thought that here was the very spot for cheap lodgings.

Pushing open the door, I found myself in a wide, low, straggling entry with old-fashioned wainscots, like the bulwarks of some condemned old craft. On one side hung a very large oil painting representing a Cape-Horner in a great hurricane. The opposite wall was hung all over with a heathenish array of clubs and spears. Some were thickly set with glittering teeth; others were tufted with knots of human hair. Mixed with these were rusty

old whaling lances and harpoons all broken and deformed. These, as I learned later, were storied weapons. With this long lance did Nathan Swain kill 15 whales between a sunrise and a sunset. And that harpoon—so like a corkscrew now—was flung in Javan seas, and run away with by a whale, years afterwards slain off the Cape of Bianco.

Crossing this dusky entry, I came upon the still duskier public room, at one end of which stood the vast arched bone of a whale's jaw, so wide that a coach might almost drive beneath it. Within those jaws was the bar, ranged round with old decanters, bottles, flasks; and there a number of seamen were gathered.

When I sought the landlord, he told me that his house was full—not a bed unoccupied. "But avast," he added, tapping his forehead, "you hain't no objections to sharing a harpooneer's blanket, have ye?"

I told him that I never liked to sleep two in a bed; but rather than wander farther on so bitter a night, I would put up with the half of any decent man's blanket.

"I thought so. All right; take a seat. Supper'll be ready directly."

I sat down on an old carved wooden settle. At one end a ruminating tar was still further adorning it with his jack-knife, stooping over and diligently working away at the space between his legs. He was trying his hand at a ship under full sail, but he didn't make much headway, I thought.

At last we were summoned to our meal in an adjoining room. It was as cold as Iceland—no fire at all—the landlord said he couldn't afford it. Nothing but two dismal tallow candles. We were fain to button up our monkey jackets, and hold to our lips cups of scalding tea with our half-frozen fingers. But the fare was of the most substantial kind—not only meat and potatoes, but dumplings. One young fellow in a green box coat addressed himself to these dumplings in a most direful manner.

"My boy," said the landlord, "you'll have the nightmare to a dead sartainty."

"Landlord," I whispered, "that ain't the harpooneer, is it?"

"Oh, no," said he, looking diabolically funny, "the harpooneer is a dark complexioned chap."

The more I pondered over this harpooneer, as I sat by the fire after supper, the more I abominated the thought of sleeping with him. It was fair to presume that being a harpooneer, his linen would not be of the tidiest. I began to twitch all over. Thinks I, I'll wait and have a good look at him before I go to bed.

But though the other boarders kept coming in by ones and twos, yet no sign of my harpooneer.

"Landlord!" said I, "what sort of a chap is he—does he always keep such late hours?" It was now hard upon 12 o'clock.



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The landlord chuckled. "No," he answered, "generally he's an early bird. But tonight he went out a peddling and, maybe, he can't sell his head."

"Landlord," said I, "landlord, tell me who and what this harpooneer is, and whether I shall be safe to spend the night with him."

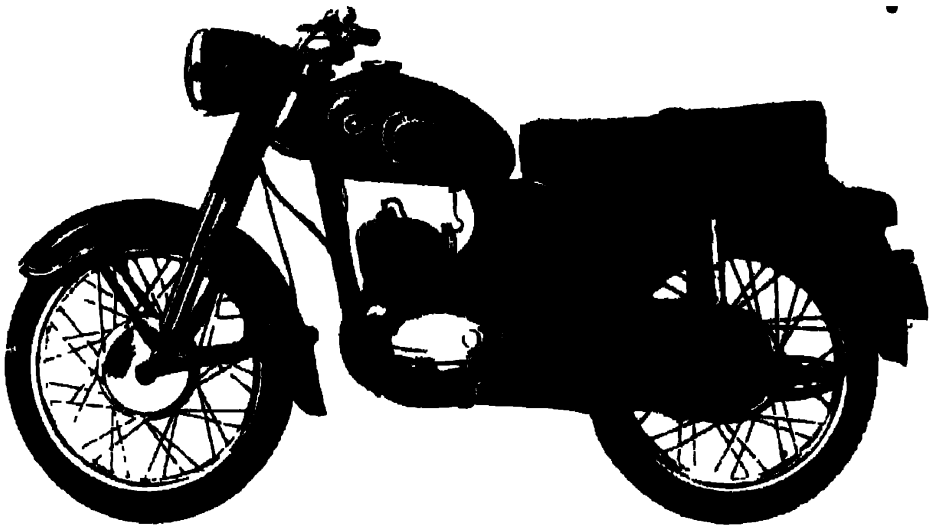
"Be easy," said the landlord, "this here harpooneer has just arrived from the South Seas, where he brought up a lot of embalmed New Zealand heads (great curios, you know), and he's sold all on 'em but one, and that one he's trying to sell tonight, cause tomorrow's Sunday, and it would not do to be sellin' human heads about the streets when folks is goin' to church. He wanted to, last Sunday, but I stopped him just as he was goin' out of the door with four heads strung on a string, for all the airth like onions . . . But come, it's getting dreadful late, you had better be turning in—it's a nice bed. There's plenty room for two to kick about in that bed. Come along here, I'll give ye a glim." He lighted a candle and led the way.

I was ushered into a small room, cold as a clam, and furnished, sure enough, with a prodigious bed. A seaman's bag lay in one corner, and a tall harpoon was standing at the head of the bed.

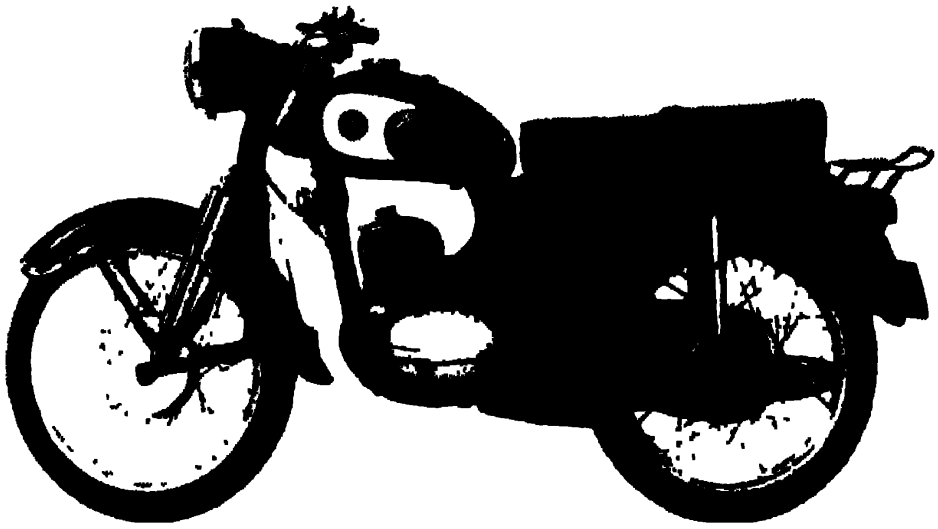
I sat for a time thinking about this head-peddling harpooneer. But beginning to feel very cold, I made no more ado, but jumped out of my pantaloons and boots, tumbled into bed, and commended myself to the care of heaven. I had pretty nearly made a good offing towards the land of Nod, when I heard a heavy footfall in the passage, and saw a glimmer of light under the door.

Lord save me, thinks I, that must be the harpooneer, the infernal head-pedlar. But I lay perfectly still, and resolved not to say a word till spoken to. Holding a light in one hand, and that identical New Zealand head in the other, the stranger entered the room, and without looking towards the bed, placed his candle on the floor in one corner, and stowed the head in his seaman's bag. I was all eagerness to see his face, but could not till he turned round—when, good heavens! What a sight! Such a face! It was of a dark, purplish yellow colour, here and there stuck over with large, blackish looking squares. At first I thought he had been in a dreadful fight, and those squares were sticking-plaster; but soon the truth occurred to me. This harpooneer, in the course of his distant voyages, must have been tattooed by cannibals.

He now took off his hat—a new beaver hat—when I came nigh singing out with fresh surprise. There was no hair on his head—nothing but a small scalp-knot twisted up on his forehead. His bald purplish head looked for all the world like a mildewed skull. Had not the stranger stood between me



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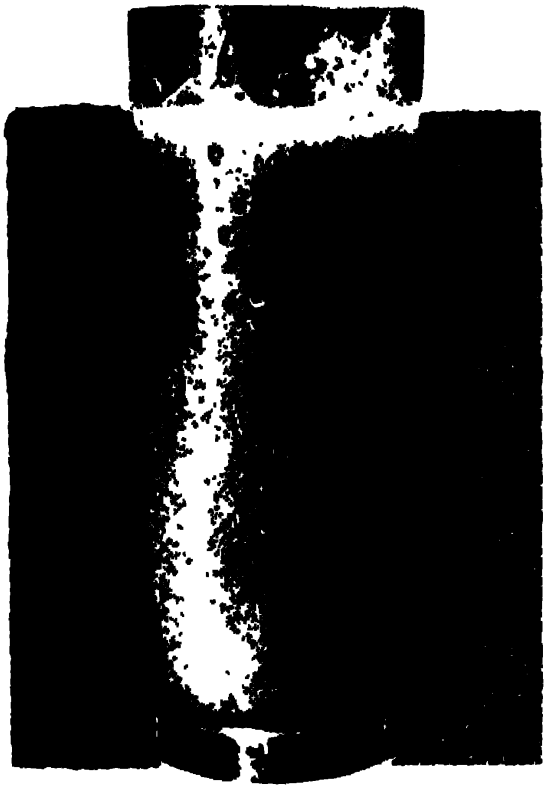
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and the door, I would have bolted out of it quicker than ever I bolted a dinner. I was so frightened, in truth, that I dared not address him, and so lay still. It was now quite plain that he must be some abominable savage shipped aboard a whaleman in the South Seas, and so landed in this Christian country.

And now the savage went about something that completely fascinated my attention, and convinced me that he must indeed be a heathen. Going to his heavy great-coat, he fumbled in the pockets, and produced a curious little deformed image with a hunch on its back, and exactly the colour of a three-days'-old Congo baby. Remembering the embalmed head, at first I almost thought that this black manikin was a real baby preserved in some similar manner. But seeing that it glistened like polished ebony, I concluded that it must be nothing but a wooden idol, which indeed it proved to be. For now the savage goes up to the empty fireplace, sets up this little hunchbacked image between the andirons, and begins to utter guttural noises, singing some pagan psalmody or other.

I thought it was high time, now or never, before the light was put out, to speak. But before I could find my voice, suddenly the light was extinguished, and this wild cannibal sprang into bed with me. I sang out, I could not help it now; and giving a sudden grunt of astonishment he began feeling me. I

began to yell. "Landlord, for God's sake! Angels! Save me!"

Thank heaven, the landlord came immediately into the room, light in hand, and leaping from the bed I ran to him.

"Don't be afraid now," said he, grinning again. "Queequeg here wouldn't harm a hair of your head."

"Stop your grinning," shouted I, "and why didn't you tell me that that harpooneer was a cannibal?"

"I thought ye know'd it. Didn't I tell ye he was a-peddlin' heads around town? But turn in again and go to sleep. Queequeg, look here—you sabbee me, I sabbee you—this man sleepee you—you sabbee?"

"Me sabbee plenty"—grunted Queequeg, sitting up in bed.

"You gettee in," he added, throwing the clothes to one side. He really did this in a very civil way. I stood looking at him a moment. For all his tattooings he was on the whole a clean, comely looking cannibal. What's all this fuss I have been making about, thought I to myself—the man's a human being just as I am. Better sleep with a sober cannibal than a drunken Christian.

Seeing me hesitate, Queequeg again politely motioned me to get into bed—rolling over to one side as much as to say—I won't touch a leg of ye.

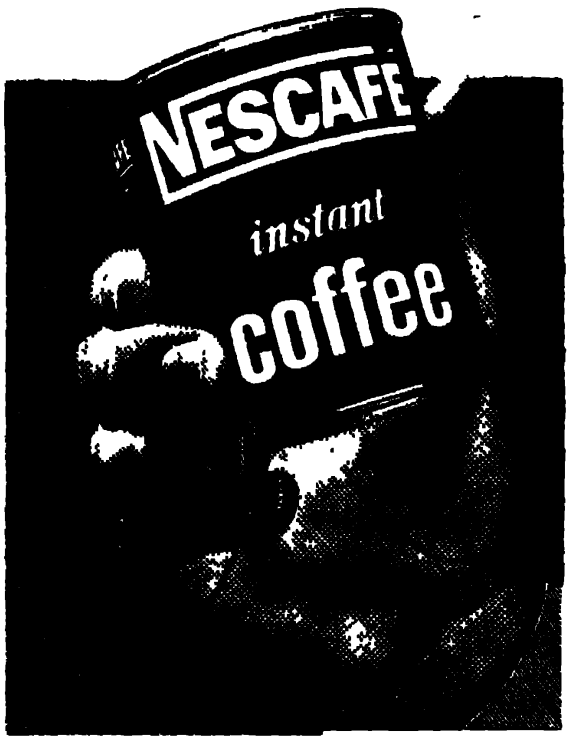
"Goodnight, landlord," said I, "you may go."

I turned in, and never slept better in my life.

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The next morning, upon descending into the bar room, I found it full of the boarders. They were nearly all whalemen; chief mates, and second mates, and third mates, and sea carpenters, and coopers, and harpooneers, and ship keepers; a brown and brawny company, with bosky beards; an unshorn, shaggy set, all wearing monkey jackets for morning gowns.

"Grub, ho!" cried the landlord, flinging open a door, and in we went to breakfast.

They say that men who have seen the world thereby become quite at ease in manner, quite self-possessed in company. Not always, though. I had thought at breakfast to hear some good stories about whaling; but to my no small surprise nearly every man maintained a profound silence. And not only that, but they looked embarrassed. Yes, here were a set of sea dogs, many of whom without the slightest bashfulness had boarded great whales on the high seas—entire strangers to them—and duelled them dead without winking; and yet, here they sat at breakfast table—silent and sheepish. A curious sight; these bashful bears, these timid warrior whalemen!

But as for Queequeg—why, Queequeg sat there among them—at the head of the table, too, it so chanced—as cool as an icicle. To be sure I cannot say much for his breeding. His greatest admirer could not have cordially justified his bringing his harpoon into breakfast with him, and using it to grapple the beefsteaks towards him. But *that* was certainly very coldly done by him, and, as everyone knows, to do anything coolly is to do it genteelly.

After breakfast, I sallied out for a stroll. If I had been astonished at first catching a glimpse of so outlandish an individual as Queequeg in a civilized town, that astonishment soon departed as I walked. It is true that in any considerable seaport you may see the queerest looking nondescripts from foreign parts. But in New Bedford, actual cannibals stand chattering at street corners. It makes a stranger stare.

But besides the Feegeeans, Tongatobooarrs, and Pannangians, and besides the wild specimens of the whaling craft which unheeded reel about the streets, you will see other sights still more curious, certainly more comical. There weekly arrive in this town scores of green backwoodsmen, all athirst for gain and glory in the fishery. They are mostly young, of stalwart frames; fellows who have felled forests, and now seek to drop the axe and snatch the whale lance. Many are as green as the Green Mountains whence they came. Look there! that chap strutting round the corner. He wears a beaver hat and swallow tailed coat, girded with a sailor belt and a sheath knife. Here comes another with a sou'wester and a

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bombazine cloak. Ah, poor Hay-Seed! how bitterly will burst those garments in the first howling gale.

But think not that this famous town has only harpooneers, cannibals, and bumpkins to show her visitors. Not at all. The soil of New Bedford is rocky and barren. Yet, in spite of this, nowhere in all America will you find more patrician like houses; parks and gardens more opulent. Whence came they?

Go and gaze upon the iron emblematical harpoons round yonder lofty mansions, and your question will be answered. Yes; all these brave houses and flowery gardens came from the Atlantic, Pacific, and Indian oceans. One and all, they were harpooned and dragged up hither from the bottom of the sea.

In New Bedford, fathers, they say, give whales for dowers to their daughters, and portion off their nieces with a few porpoises apiece. You must go to New Bedford to see a brilliant wedding; for, they say, they have reservoirs of oil in every house, and every night recklessly burn their lengths in spermaceti candles.

And the women of New Bedford, they bloom like their own red roses. Elsewhere match that bloom of theirs ye cannot, save in Salem, where they tell me the young girls exhale such fragrance, their sailor sweethearts smell them miles off-shore, as though they were drawing nigh the odorous Moluccas instead of the Puritanic sands.

On the Monday, Queequeg and I —companions now—crossed by packet to Nantucket, and there I learned that the *Pequod* was preparing for a voyage. She was a rather small ship, weather-stained by the typhoons and calms of the four oceans. Boarding her, I found an elderly man, rolled up in blue pilot-cloth, cut in the Quaker style.

"Is this the Captain of the *Pequod?*" said I.

"Supposing it be, what dost thou want of him?" he demanded.

"I was thinking of shipping."

"Thou wast, wast thou? I see thou art no Nantucketer—ever been in a stove boat?"

"No, Sir, I never have."

"Dost know nothing at all about whaling, I dare say—eh?"

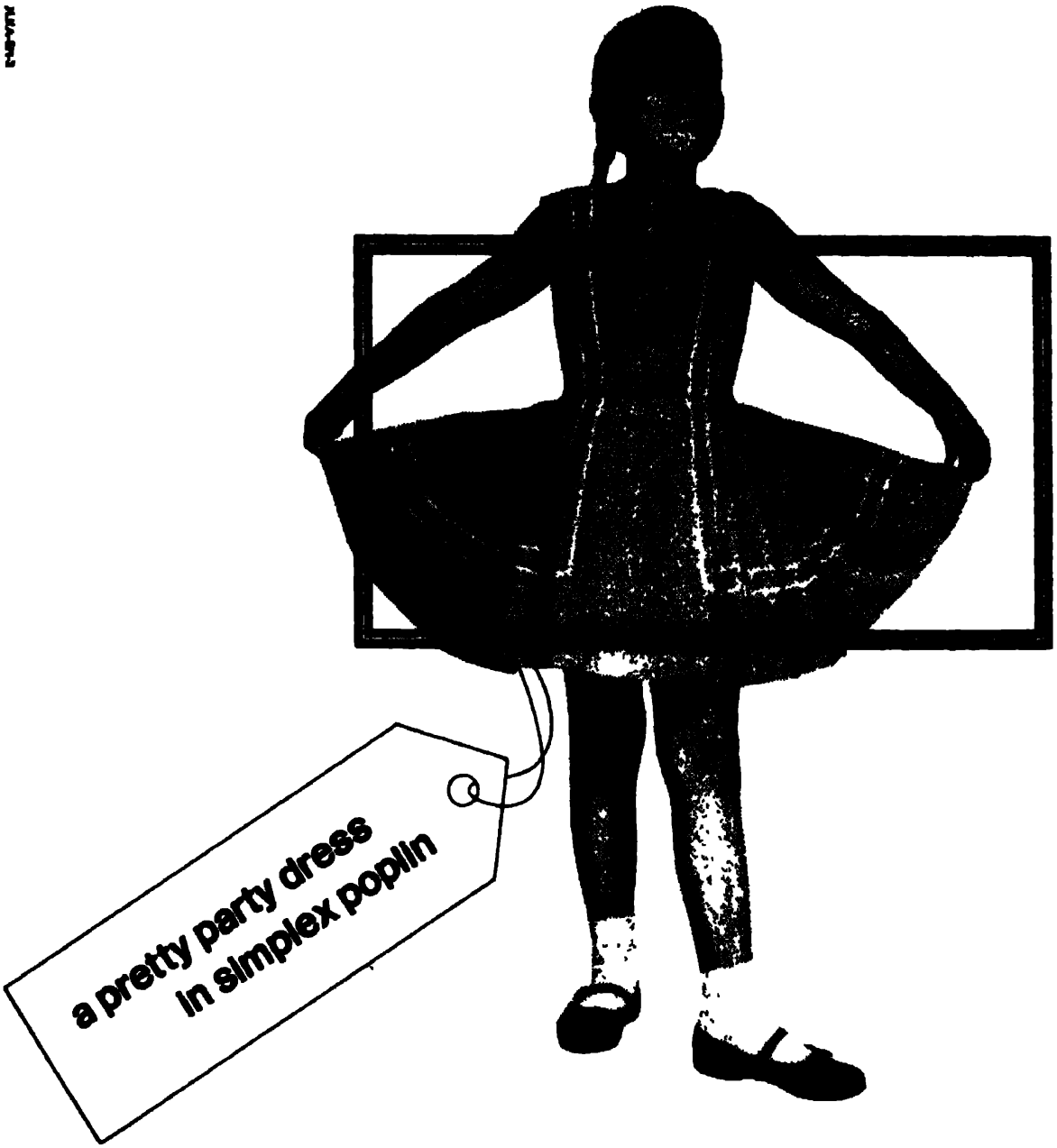
"Nothing, Sir; but I have no doubt I shall soon learn. I've been several voyages in the merchant service, and I think that——"

"Marchant service be damned. Talk not that lingo to me. But flukes, man, what makes thee want to go a-whaling, eh? It looks a little suspicious, don't it, eh? Didst not rob thy last Captain?"

I protested my innocence, perceiving that this Quakerish Nantucketer was distrustful of all aliens, unless they hailed from Cape Cod or the neighbouring whaling centre at Martha's Vineyard.

"But what takes thee a-whaling? I want to know that before I think of shipping ye."

"Well, Sir, I want to see what



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whaling is. I want to see the world."

"Art thou the man to pitch a harpoon down a live whale's throat, and then jump after it? Answer, quick!"

"I am, Sir, if it should be positively indispensable to do so; which I don't take to be the fact."

"Good. Now then, thou not only wantest to go a-whaling; but ye also want to see the world. Well then, just take a peep over the weather-bow, and tell me what ye see there."

"Not much," I replied. "Nothing but water; considerable horizon though, and a squall coming up."

"Well, what dost thou think then of seeing the world? Do you wish to go round Cape Horn to see any more of it, eh?"

I was a little staggered, but go a-whaling I must, and I would; and the *Pequod* was a good ship—all this I now affirmed. Seeing me so determined, the old man expressed his willingness to ship me.

"Captain," said I, "I have a friend with me who wants to ship too—shall I bring him down tomorrow?"

"Has he ever whaled it any?"

"Killed more whales than I can count, Captain."

"Well, bring him along then."

Next day, therefore, Queequeg came with me aboard the *Pequod*. His appearance startled the Quaker captain. "Look you," he said, turning to him, "art thou at present in communion with any Christian church? I will not ship a heathen."

"Why," said I, "he's a member of the First Congregational Church." (Here be it said that many tattooed savages sailing in Nantucket ships at last come to be converted.)

"First Congregational Church!" cried the captain. "What! That worships in Deacon Deuteronomy Coleman's meetinghouse?" And so saying, he put on his spectacles, and took a long look at Queequeg.

"He hasn't been baptized right," he then said, "or it would have washed some of that devil's blue off his face."

"I don't know anything about Deacon Deuteronomy or his meeting," said I. "All I know is, that Queequeg here is a born member of the First Congregational Church: the great and everlasting First Congregation of this whole worshipping world; we all belong to that, and in *that* we all join hands."

"Splice, thou mean'st *splice* hands," cried the captain, drawing nearer. "Young man, you'd better ship for a missionary, instead of a foremast hand; I never heard a better sermon. I say, tell Quohog there—what's that you call him?—tell Quohog to step along. By the great anchor, what a harpoon he's got there! And he handles it about right. I say, Quohog, did you ever stand in the head of a whaleboat?"

Without saying a word, Queequeg, in his wild sort of way, jumped upon the bulwarks, from thence into the bow of one of the

whale-boats, hanging to the side. Then poising his harpoon, he cried out:

"Cap'ain, you see him small drop tar on water dere?" And taking aim, he darted the iron right over the old man's broad brim, clean across the ship's decks, and struck the glistening tar spot out of sight.

"Quick," said the startled captain, as Queequeg quietly hauled in the line, "get the ship's papers. We must have Hedgehog there in one of our boats."

On a cold day not long afterwards, the *Pequod* weighed anchor, and sailed out upon her cruise. Her chief mate was Starbuck, another Nantucket Quaker, young, spare and tough. "I will have no man in my boat," said Starbuck, "who is not afraid of a whale."

By this he seemed to mean that the most useful courage is that which arises from the fair estimation of the peril.

"Aye, aye," said Stubb, the second mate, "Starbuck, there, is as careful a man as you'll find anywhere in this fishery." But we shall ere long see what that word "careful" precisely means when used by a whale hunter.

Stubb, the second mate, was a native of Cape Cod. A happy-go-lucky man, good-humoured and easy; he presided over his whale-boat as if the most deadly



encounter were but a dinner, and his crew all invited guests.

The third mate was Flask, from Martha's Vineyard. A short, stout, ruddy young fellow, very pugnacious concerning whales, who somehow seemed to think that the great leviathans had personally affronted him; and therefore it was a sort of point of honour with him to destroy them whenever encountered.

Now these three mates were momentous men. They it was who commanded the *Pequod's* boats as headsmen. Each mate also had his harpooneer.

First of all was Queequeg, whom Starbuck, the chief mate, had selected for his squire.

Next was Tashtego, an Indian from a tribe on Martha's Vineyard, which had long supplied Nantucket with daring harpooneers. Tashtego was Stubb's squire.

Third was Daggoo, a gigantic, coal-black Negro-savage. Suspended from his ears were two golden hoops, so large that the sailors called them ringbolts, and would talk of securing the topsail halyards to them. This imperial Negro was the squire of little Flask, who looked like a chessman beside him.

We had sailed many weeks towards the warm cruising grounds when, one squally afternoon, came that old cry from the lips of Tashtego, a wild figure, hovering

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"Where-away?"

"On the lee-beam. A school of them!"

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"Lower away!"

The sheaves whirled round in the blocks; with a wallow, the three boats dropped into the sea; while, with a dexterous, off-handed daring, unknown in any other vocation, the sailors, goat-like, leaped down the rolling ship's side into them.

"Pull, pull, my fine hearts-alive; pull, my children," drawlingly sighed Stubb to his crew. "Why don't you break your backbones, my boys? Oh, don't be in a hurry. Only stop snoring, and pull. Why in the name of gudgeons and gingercakes don't ye pull? Pull and break something! Pull, and start your eyes out! Here!" whipping out the sharp knife from his girdle, "every mother's son of ye draw his knife, and pull with the blade between his teeth. That's it—that's it. Now ye do something, my steel-bits. Start her—start her, my silver-spoons!"

Stubb had this peculiar way of inculcating in his crew the religion of rowing. But you must not suppose that he ever flew into downright passions. He would say the most terrific things to his crew, in a tone so strangely compounded of fun and fury that no oarsman could help pulling for dear life, and yet pulling for the mere joke of the thing.

To a landsman, no whale would have been visible at that moment; nothing but a troubled bit of greenish white water, and thin scattered puffs of vapour hovering over it. All the boats were now in keen pursuit of that one spot of troubled water and air. But it bade fair to outstrip them.

"Pull, pull, my good boys," said Starbuck, in the lowest possible but intensest whisper to his men.

How different the loud little Flask. "Sing out and say something, my hearties. Roar and pull, my thunderbolts! Beach me, beach me on their black backs; only do that for me, and I'll sign over to you my Martha's Vineyard plantation, boys; including wife and children. Lay me on—lay me on!"

It was a sight full of quick wonder and awe! The vast swells of the omnipotent sea; the brief suspended agony of the boat, as it would tip for an instant on the knifelike edge of the sharper waves; the sudden profound dip into the watery hollows; the keen goadings to gain the top of the opposite hill; the *Pequod* bearing down upon her boats with outstretched sails, like a wild hen after her screaming brood.

The whales seemed separating their wakes, and the boats were

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pulled more apart; Starbuck—in whose boat I rowed—giving chase to three whales running dead to leeward. Our sail was now set and, with a rising wind, we rushed along; the boat going with such madness through the water that the lee oars could scarcely be worked rapidly enough to escape being torn from the rowlocks.

Soon we were running through a wide veil of mist; neither ship nor boat to be seen.

"Give way, men," whispered Starbuck. "There is time to kill a fish yet before the squall comes. There's white water again! Close to! Spring!" Then, with a lightning-like hurtling whisper Starbuck said: "Stand up!" and Queequeg, harpoon in hand, sprang to his feet.

Though not one of the oarsmen was then facing the peril so close to them ahead, yet with their eyes on the intense countenance of the mate in the stern of the boat, they knew



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that the imminent instant had come; they heard, too, an enormous wallowing sound as of 50 elephants stirring in their litter. Meanwhile the boat was still booming through the mist.

"That's his hump. *There, there,* give it to him!" whispered Starbuck.

A short rushing sound leaped out of the boat; it was the darted iron of Queequeg. Then all in one welded commotion came an invisible push from astern, while forward the boat seemed striking on a ledge; the sail collapsed and exploded; a gush of scalding vapour shot up near by; something rolled and rumbled like an earthquake beneath us. The whole crew were half suffocated as they were tossed helter-skelter into the white curdling cream of the squall. Squall, whale and harpoon had all blended together; and the whale, grazed by the iron, escaped.

Though swamped, the boat was nearly unharmed. Swimming round it we picked up the floating oars, and tumbled back to our places. There we sat up to our knees in the water. The wind increased to a howl; in vain we hailed the other boats. Wet, drenched through, and shivering cold, we sat, despairing of ship or boat. Suddenly Queequeg started to his feet, hollowing his hand to his ear. We all heard a faint creaking, as of ropes and yards hitherto muffled by the storm. The sound came nearer and nearer; the thick mists were dimly parted by a huge, vague form, and the ship loomed into view, bearing down close upon us.

Thus we were at last taken up and safely landed on board. Ere the squall came close to, the other boats had returned to the ship.

"Queequeg," said I, when they had dragged me to the deck, and I was still shaking the water from my jacket; "Queequeg, my fine friend, does this sort of thing often happen?" Without much emotion, though soaked through just like me, he gave me to understand that such things did often happen.

"Mr. Stubb," said I, turning to that worthy, who was now calmly smoking his pipe in the rain; "Mr. Stubb, I think I have heard you say that of all whalemen you ever met, our chief mate, Mr. Starbuck, is by far the most careful and prudent. I suppose then, that going plump on a flying whale with your sail set in a foggy squall is the height of a whaleman's discretion?"

"Certain. I've lowered for whales from a leaking ship in a gale off Cape Horn."

"Mr. Flask," said I, turning to the third mate, who was standing close by, "you are experienced in these things, and I am not. Will you tell me whether it is an unalterable law in this fishery, Mr. Flask, for an oarsman to break his own back pulling himself back-foremost into death's jaws?"

"Can't you twist that smaller?" said Flask. "Yes, that's the law. I should like to see a boat's crew

backing water up to a whale face foremost Ha, ha! The whale would give them squint for squint, mind that!"

We were now cruising in what whalemen call a lively ground, and it was not many days before the cry from the masthead rang out again And lo! close under our lee, not 40 fathoms off, a gigantic sperm whale lay rolling like the capsized hull of a frigate, his broad, glossy back glistening in the sun's rays like a mirror Spouting his vapoury jet, the whale looked like a portly burgher smoking his pipe of a warm afternoon But that pipe, poor whale, was thy last As it struck by some enchanter s wand, our sleepy ship all at once started into wakefulness

The sudden activity must have alarmed the whale, and ere the boats were down, majestically turning, he swam away to leeward, but with such a steady tranquillity that orders were given that no man must speak above a whisper So, seated like Red Indians on the gunwales of the boats, we swiftly but silently paddled along Presently, as we glided in chase, the monster perpendicularly flitted his tail 40 feet into the air, and then sank out of sight like a tower swallowed up

"There go flukes!" was the cry an announcement immediately followed by Stubb s scratching a match

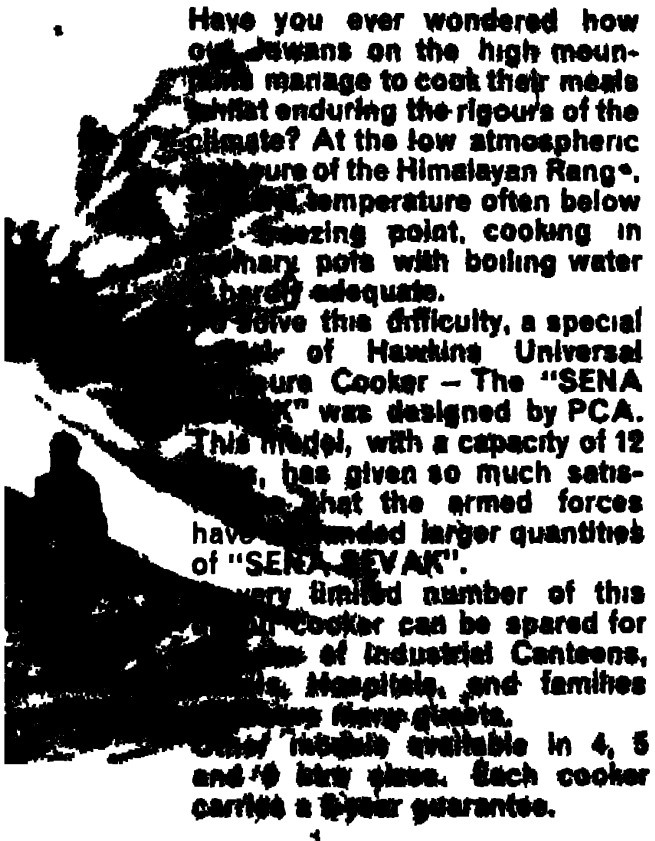


across the sandpaper of his palm and igniting his pipe, for now a respite was granted After the full interval of his sounding had elapsed, the whale rose again, close to Stubb's boat Caution was no longer of use Paddles were dropped, and oars came loudly into play And still puffing at his pipe, Stubb cheered on his crew to the assault

"Start her, start her, my men! Don t hurry yourselves, take plenty of time but start her, start her like thunder laps, that s all,' cried Stubb spluttering out the smoke as he spoke

Like desperadoes they tugged and they strained, till the welcome cry was heard "Stand up Tashtego! Give it to him!" The harpoon was hurled "Stern all!" The oarsmen backed water; the same moment something went hot and hissing along every one of their wrists It was the magical line The boat now flew through the boiling water, each man with might and main clinging to his seat, to prevent being tossed to the foam, and the tall form of Tashtego at the steering oar crouching almost double, in order to bring down his centre of gravity Whole Atlantics and Pacifics seemed passed as they shot on their way, till at length the whale somewhat slackened his flight

'Haul in—haul in!" cried Stubb to the bowsman And, facing round



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towards the whale, all hands began pulling the boat up to him, while yet the boat was being towed on. Soon ranging up by his flank, Stubb, firmly planting his knee in the clumsy cleat, sent dart after dart into the flying fish; at a word of command, the boat alternately sterning out of the way of the whale's horrible wallow, and then ranging up for another fling.

The red tide now poured from all sides of the monster like brooks down a hill. His tormented body rolled not in brine but in blood, which bubbled and seethed for furlongs behind in their wake. The slanting sun, playing upon this crimson pond in the sea, sent back its reflection into every face, so that they all glowed to each other like red men.

"Pull up—pull up!" now cried Stubb to the bowsman, as the waning whale weakened. "Pull up—close to!" and the boat ranged along the fish's flank. When reaching far over the bow, Stubb slowly churned his long sharp lance into the fish, and kept it there, carefully churning and churning, seeking the innermost life of the fish. And now it is struck; for, starting from his trance into that unspeakable thing called his "flurry," the monster horribly wallowed in his blood, overwrapped himself in impenetrable, mad, boiling spray, and then lay motionless.

"He's dead, Mr. Stubb," Daggoo called from his boat.

"Yes; both pipes smoked out!" and withdrawing his own from his mouth, Stubb scattered the dead ashes over the water; and, for a moment, stood thoughtfully eyeing the vast corpse he had made.

Stubb's whale had been killed some distance from the ship. It was a calm; so, forming a tandem of three boats, we commenced the slow business of towing the trophy to the *Pequod*. And now, we 18 men slowly toiled hour after hour upon that inert, sluggish corpse in the sea; yet it seemed hardly to budge at all. Darkness came on; but three lights up and down in the *Pequod's* main rigging dimly guided our way; till drawing near at last we secured the whale alongside.

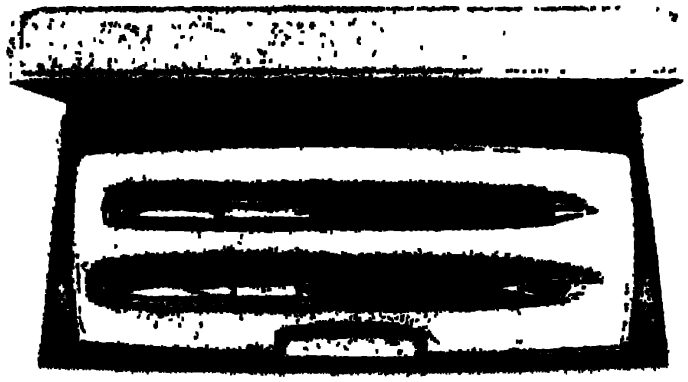
Stubb, flushed with conquest, now betrayed an unusual excitement. Stubb was a high liver; like many Nantucketers, he was somewhat intemperately fond of the whale as a flavourish thing to his palate.

"A steak, a steak, ere I sleep! You, Daggoo! Overboard you go, and cut me one from his small."

About midnight that steak was cut and cooked; and lighted by two lanterns of sperm oil. Stubb stoutly stood up to his spermaceti supper at the capstan-head. Nor was Stubb the only banqueter on whale's flesh that night. Mingling their mumblings with his own mastications, thousands on thousands of sharks, swarming round the dead leviathan, feasted on its fatness. The few sleepers below in their bunks were often

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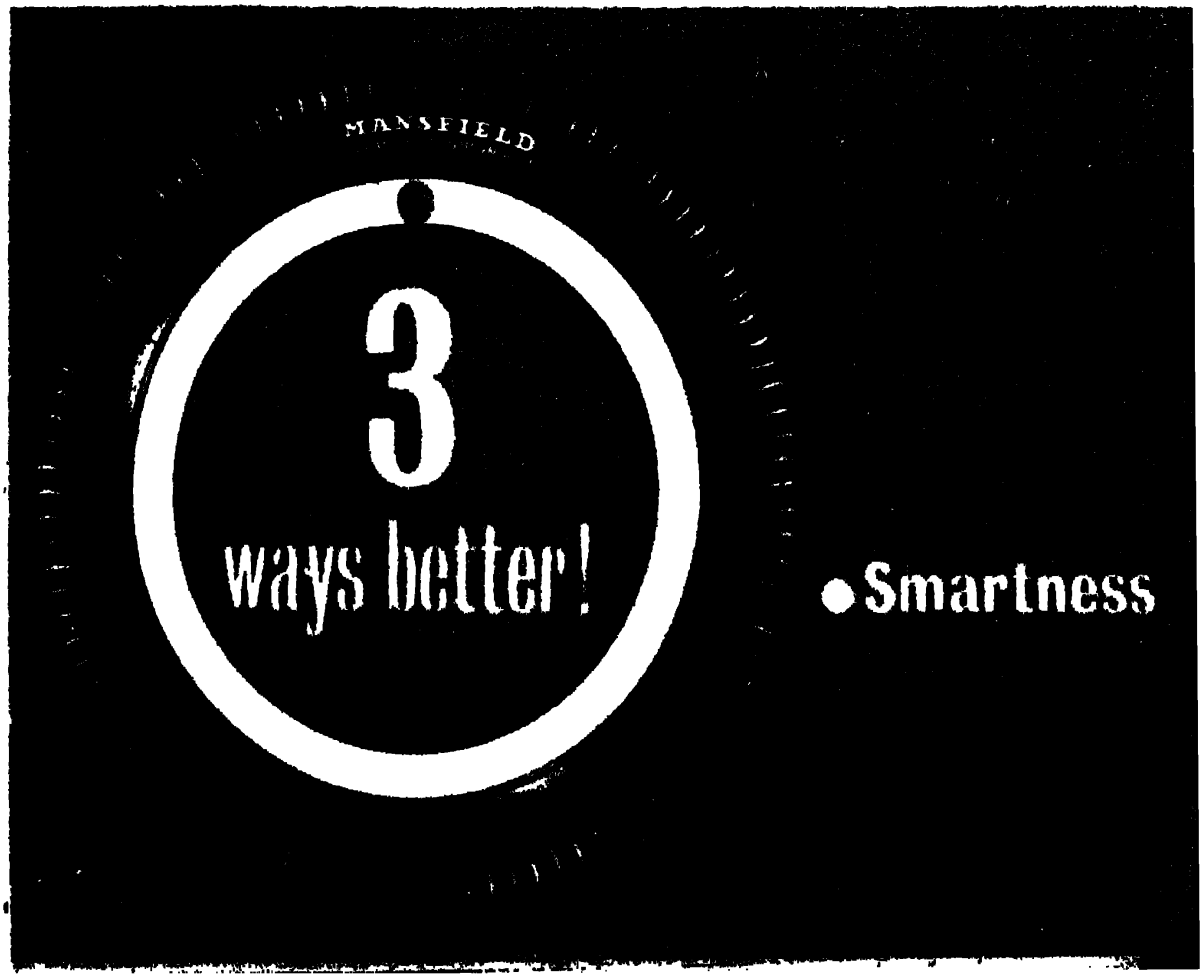
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startled by the sharp slapping of their tails against the hull, within a few inches of the sleepers' hearts. Peering over the side you could just see them wallowing in the black waters, and turning over on their backs as they scooped out huge globular pieces of the whale of the bigness of a human head. There is no conceivable time or occasion when you will find sharks in such countless numbers, and in gayer or more jovial spirits, than around a dead sperm whale, moored by night to a whaleship at sea.

"Cook, cook! Where's that old Fleece?" cried Stubb at length, darting his fork into the dish. "Sail this way, cook!"

The old black, not in very high glee at being roused from his warm hammock at a most unseasonable hour, came shambling along from his galley.

"Cook," said Stubb, rapidly lifting a rather reddish morsel to his mouth, "don't you think this steak is rather overdone? Don't I always say that to be good, a whale steak must be tough? Those sharks now over the side—don't you see they prefer it tough and rare? What a shindy they are kicking up! Cook, go and talk to 'em; tell 'em they are welcome to help themselves civilly, but they must keep quiet. Here, take this lantern and go preach to them!"



Suddenly taking the offered lantern, old Fleece limped to the bulwarks; and then, with one hand dropping his light low over the sea, to get a good view of his congregation, he spoke: "Fellow critters: I'se ordered here to say dat you must stop dat dam noise dare. You hear? Stop dat dam smacking ob de lips!"

"Cook," here interposed Stubb. "Cook, why, damn your eyes, you mustn't swear that way when you're preaching. That's no way to convert sinners, cook!"

"Den preach to him yourself," sullenly turning to go.

"No, cook; go on, go on."

"Well, den—Belubed fellow critters——"

"Right!" exclaimed Stubb, approvingly. "Coax 'em to it!"

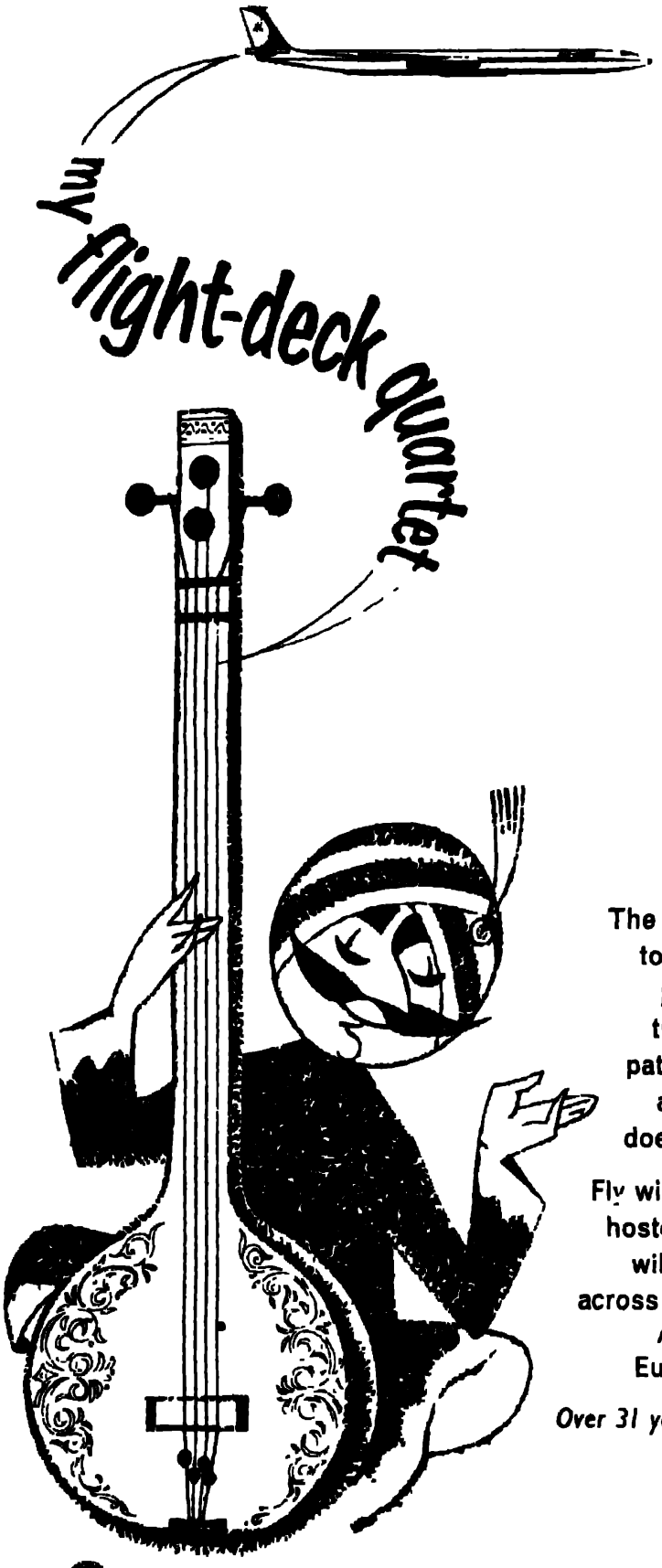
"Your voraciousness, fellow critters, I don't blame ye so much for; dat is natur, and can't be helped; but to gobern dat wicked natur, dat is de pint. You is sharks, sartin; but if you gobern de shark in you, why den you be angel; for all angel is not'ing more dan de shark well goberned."

"Well done, old Fleece!" cried Stubb, "that's Christianity. Go on."

"No use goin' on; de dam villains will keep a scroughin' and slappin' each oder. Massa Stubb; dey don't hear one word."

"Upon my soul, I am about of the same opinion; so give the





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benediction, Fleece, and I'll on with my supper."

Upon this, Fleece, holding both hands over the fishy mob, raised his shrill voice, and cried:

"Cussed fellow critters! Kick up de dam'dest row as ever you can; fill your dam bellies 'till dey bust—and den die."

The wondrous voracity of sharks, which robs the whalers of much blubber before the cutting-in begins, can at times be considerably diminished by vigorously stirring them up with sharp whaling spades. Therefore Stubb now ordered the cutting stages suspended over the side, lowered three lanterns close to the turbid sea, and set Queequeg and another mariner to killing the sharks, by striking the keen steel deep into their skulls, seemingly their only vital part. But in the foamy confusion, the marksmen sometimes missed their mark and struck the twisting bellies; and this brought about new revelations of sharkish ferocity. They viciously snapped, not only at each other's disembowelments, but like flexible bows, bent round and bit their own till those entrails seemed swallowed over and over again by the same mouth. Nor was this all. It was unsafe to meddle with the corpses of these creatures. Killed and hoisted on deck for the sake of his skin, one of these sharks almost took poor Queequeg's hand off, when he tried to shut down the dead lid of his murderous jaw.

It was a Saturday night, and such a Sabbath as followed! The *Pequod* was turned into what seemed a shambles—every sailor a butcher. You would have thought we were offering up 10,000 red oxen to the sea gods.

First, the great blubber hook was lowered to the whale's back and





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there inserted in a hole cut by Starbuck and Stubb. This done, the main body of the crew, striking up a wild chorus, now commence heaving in one dense crowd at the windlass. With every gasping heave of the windlass, the ship leans over to the whale; till at last a swift, startling snap is heard; with a great swash the ship rolls upward and backward from the whale, and the triumphant tackle drags up the first strip of blubber. This prodigious mass sways to and fro across the deck, as if let down from the sky, and everyone present must take good heed to dodge it when it swings, else it may box his ears and pitch him headlong overboard.

Now as the blubber envelops the whale precisely as the rind does an orange, so is it stripped from the body precisely as an orange is sometimes stripped by spiralizing it. For the strain constantly kept up by the windlass keeps the whale rolling over and over in the water, and as the blubber peels off, it is lowered through the main hatchway into an unfurnished parlour called the blubber room. Here sundry nimble hands keep coiling away the long blanket-piece as if it were a great live mass of plaited serpents.

But I have not yet mentioned how the great blubber hook was inserted time after time into the holes cut by the mates. This was the duty of my particular friend Queequeg, who had to descend upon the monster's back for that purpose. The whale, be it observed, lies almost entirely submerged. So down there, some ten feet below the level of the deck, the poor harpooneer flounders about, half on the whale and half in the water, as the vast mass revolves like a treadmill beneath him.

Being the savage's bowsman, that is, the person who pulled the bow-oar in his boat, it was my cheerful duty to attend him while taking that hardscrabble scramble upon the dead whale's back. You have seen Italian organ-grinders holding a dancing ape by a long cord. Just so, from the ship's steep side, did I hold Queequeg down there in the sea, by a "monkey rope" attached to his belt and also to mine. It was a humorously perilous business for both of us. For should poor Queequeg sink to rise no more, then honour demanded that I should be dragged down in his wake.

Often I had to jerk him from between the whale and the ship, where he would occasionally fall. But this was not the only jeopardy he was exposed to. Unappalled by the massacre made upon them during the night, the sharks swarmed about like bees in a beehive.

And right in among those sharks was Queequeg; who often pushed them aside with his floundering feet. A thing altogether incredible were it not that, attracted by such prey as a dead whale, the shark will seldom touch a man. Nevertheless, it is deemed wise to look sharp to them. So Tashtego and Daggoo

continually flourished over Queequeg's head a couple of keen whale spades, wherewith they slaughtered as many sharks as they could reach.

As soon as may be, the blubber is cut in smaller pieces for the try works, two great pots set in solid masonry below the deck. The fires of these try-pots are fed from scraps and "fritters" of shrivelled blubber, so that the whale supplies his own fuel and burns by his own body. Would that he consumed his own smoke! For it is horrible to inhale, and live in it for the time you must. It has an unspeakable, wild, Hindoo odour about it, such as may lurk in the vicinity of funeral pyres.

"Haul in the chains! Let the carcass go astern!"

The tackles have now done their duty. The peeled white body of the whale flashes like a marble sepulchre; though changed in hue, it has not perceptibly lost anything in bulk. It is still colossal. Slowly it floats more and more away, the water round it torn and splashed by the insatiate sharks, and the air above vexed with rapacious flights of screaming fowls.

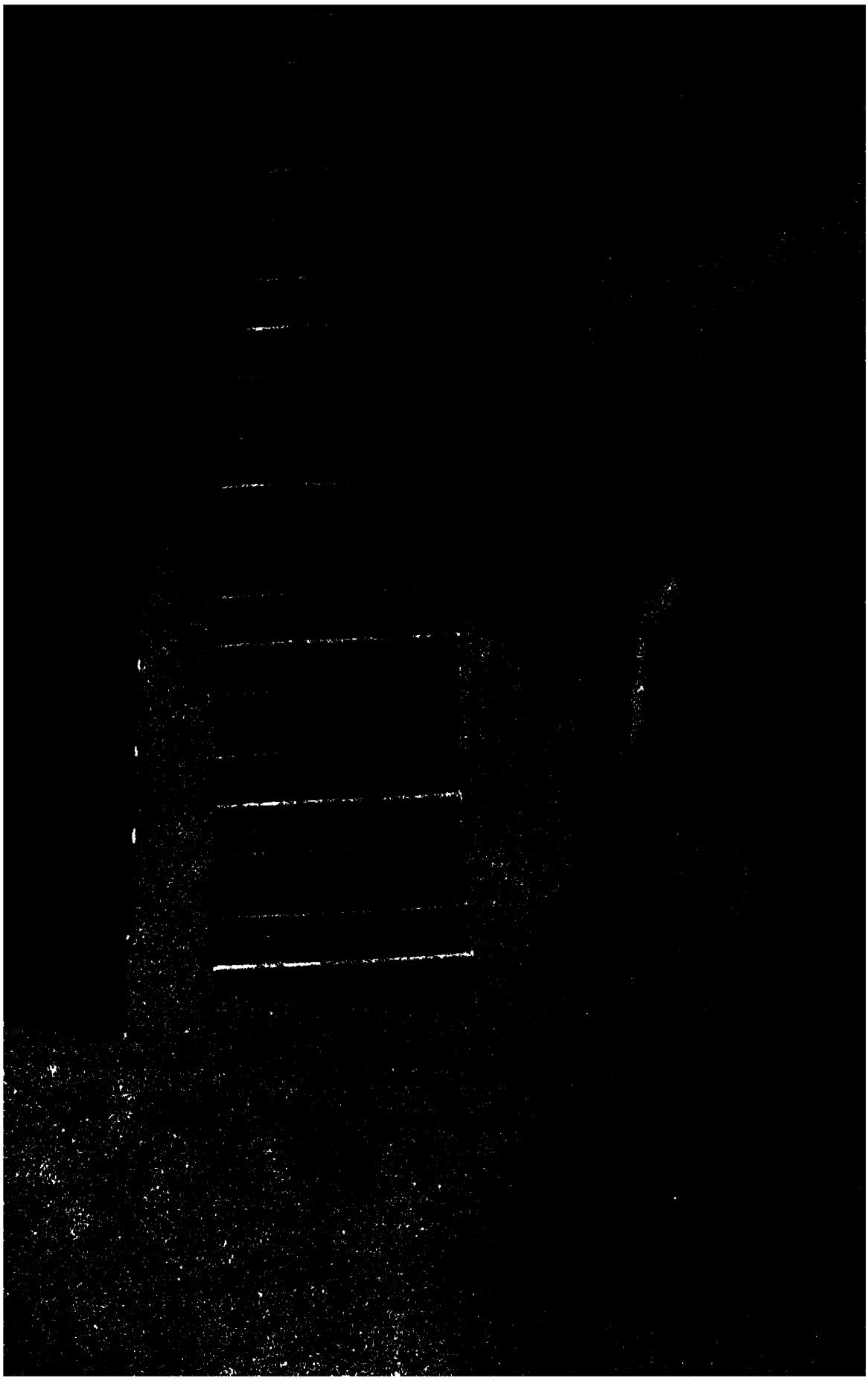
There's a most doleful and most mocking funeral! Oh, horrible vulturism of earth, from which not the mightiest whale is free!

Nor is this the end. The desecrated body, espied by some vessel from afar, with the white spray heaving high against it, is often set down in the log—*shouls, rocks, and breakers hereabouts: beware!* And for years afterwards, perhaps, ships shun the place. Thus, in death, the great whale's body may become a panic to sailors.

At length, when the last pint of oil is casked, the ship must be cleansed. Decks are scrubbed. The soot of the try works is brushed from the lower rigging. All the implements which have been in use are likewise faithfully cleansed and put away. And at last the crew may proceed to their own ablutions.

But mark: aloft there, at the three mastheads, stand three men intent on spying out more whales—which, infallibly if caught, will drop at least one small grease spot somewhere. Yes; and many is the time, when, after the severest labours—of rowing, heaving, and butchering—the sailors have finally cleansed the ship, and made a spotless dairy room of it; many is the time the poor fellows, just buttoning the necks of their clean frocks, are startled by the cry of "There she blows!" and away they fly to fight another whale, and go through the whole weary thing again.

NOTE: Readers familiar with *Moby Dick* will recall that the narrative tends increasingly toward the mystical, becoming at the last the symbolic and incredible tale of the pursuit of Moby Dick, the great White Whale, by the half-mad captain of the *Pequod*. In a grand tragic finale the *Pequod* and her company are destroyed by the White Whale—leaving Ishmael the sole survivor. THE END



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